ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

MANMA-RASKOT DISTRIBUTION LINE SUBPROJECT

SUBSTATION (33/11 KV) AND DISTRIBUTION LINE (33 KV)

KALIKOT DISTRICT, KARNALI PROVINCE

NEPAL ELECTRICITY AUTHORITY

DISTRIBUTION AND CONSUMER SERVICE DIRECTORATE

DISTRIBUTION SYSTEM UPGRADE AND EXPANSION PROJECT (DSUEP)

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ABBREVIATIONS

ACSR	Aluminum Conductor Steel Reinforced
AIIB	Asian Infrastructure and Investment Bank
BES	Brief Environment Study
COVID-19	Corona Virus Disease
CDP	Community Development Program
CPA	Core Project Area
DCSD	Distribution and Consumer Services Directorate
DHM	Department of Hydrology and Meteorology
DL	Distribution Line
DSUEP	Distribution System Upgrade and Expansion Project
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Regulation
EMF	Electromagnetic Field
ESP	Environmental and Social Policy
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ESSs	Environmental and Social Standards
GHG	Green House Gas
GIS	Geographic Information System
GoN	Government of Nepal
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
IP	Indigenous People
IUCN	International Union for Conservation of Nature
IUSGS	International Union of Geological Sciences
LPG	Liquid Petroleum Gas
MDB	Multilateral Development Bank
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MHT	Main Himalayan Thrust

NEA	Nepal Electricity Authority
PPE	Personal protective equipment
RM	Rural Municipality
RoW	Right of Way
SPA	Surrounding Project Area
SPM	Suspended Particulate Matter
SWM	Solid Waste Management
US EPA	United States, Environment Protection Agency
USGS	United States Geological Survey
VC	vulnerable community

Unit

%	Percent/ Percentage
CO_2	Carbon dioxide
dB	Decibel
g	Gram
ha	Hectare
HHs	Households
Kg	Kilogram
km	Kilometer
kV	Kilovolt
kWh	Kilo Watt Hour
ltr	Liter
LV	Low Voltage
m	Meter
masl	Meter Above Sea Level
mm	Millimeter
MVA	Mega Volt Ampere
MW	Megawatt
NRs.	Nepalese Rupees
^oC	Degree Centigrade
sq.m.	Square Meter

EXECUTIVE SUMMARY

Description of Project: Nepal Electricity Authority (NEA) under Ministry of Energy, Water Resources and Irrigation is responsible for the implementation of the Distribution System Upgrade and Expansion Project (DSUEP). DSUEP will enhance the distribution system to improve reliability and quality of electric supply in the, Karnali Province and Lumbini Province. The proposed **Manma-Raskot Distribution Line Subproject** is located within Khandachakra Municipality, Ward No. 1 and 2, Sanni Tribeni Rural Municipality (RM), Ward No. 1, 2, 3 and 4 and Raskot Municipality, Ward No. 6 of Kalikot district in Karnali Province. The Subproject requires 0.67 ha of land (Government Land) for the construction of substation. The 33 kV distribution line of 14 km passes along the right of way of the road and private land with installation of poles at the edge of the farm land. The proposed subproject is financed with loan by Asian Infrastructure Investment Bank (AIIB).

Description of Environment

Physical Environment: The proposed Subproject area lies in Himalayan zone of Nepal. The substation lies at Latitude 29°13'34.92"N, Longitude 81°38'0.12"E and elevation of 1254 masl. The climate of the Subproject area is sub-tropical. The temperature at the project valley varied from 10°C to 35°C. The average annual rainfall is estimated at approximately 1868 mm per year. The air quality and noise level of the SPA was found within the range of National Ambient Air Quality Standard and Noise Quality Standard, respectively. No water sources were recorded within distribution line (33 kV) and nearby the substation area.

Biological Environment: The proposed Subproject distribution line of passes along Kot Durbar Community Forest (CF), Nainatal CF, Bhumiraj Mela CF, Chotibagar CF, Salleri CF, Amardev CF, Chulenidanda CF, Nainalmandu CF, Naba Jyoti CF, Koirel Patal CF, Ramalmasta CF, Aulaghari CF and National Forest. The proposed substation lies in the area of Aulaghari CF. The floral species recorded during the screening field visit are Chir Pine (*Pinus roxburghii),* Baaj *(Quercus sp.),* Dabdabay *(Garuga pinnata),* Karam *(Haldina cordifolia),* Sindhre *(Mallotus philippinesis),* Mallato *(Macaranga pustulata),* and Tooni *(Toona ciliata).* Similarly, wild animal recorded during the public consultation are Barking Deer (*Muntiacus muntjak*), Marsh Rabbit (*Sylvilagus palustris*), Jackel (*Canis aureus*), Malayan Porcupine (*Hystrix brachyuran*), Ghoral (*Naemorhedus goral*), Common Leopard (*Panthera pardus*), Red Monkey (*Macaca mulatta*), Wild Boar (*Sus scrofa*), and Yellow Throated Martin (*Martes flavigula*). Altogether ten species of birds were noted around the surrounding project area House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* Jureli *(Hypsipetes leucocephalus),* Rock Piegon *(Columbia lebia),* Chyakhura (*Alectoris chukar),* Kalij (*Lophura leucomelanos)* and Eagle *(Haliaeetus leucocephalus).*

The proposed Manma-Raskot 33 kV distribution line passes through the 13 different community forests as shown in **Table 3-2**. A total of 4.234 ha of the forest area will be occupied by RoW of proposed 33 kV distribution line and substation area. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 698.

Socio-Economic Environment: The major ethnic compositions within the surrounding project area i.e., Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3 and 4 of Sanni Tribeni RM, and Ward No. 6 of Raskot Municipality are Thakuri is 33.3%, Chhetri is 28.7%, Bhramin is 18.8%, Tharu is 15.4% and Magar is 2.4% of the total population of 14,954. The implementation of the Subproject will increase the electricity beneficiaries to 7157 HHs, 30 commercial purposes and 10 industries. Manma Bazaar is the nearest business markets nearby the Subproject area. The transportation facilities in this local level seems to be satisfactory. Tap/piped water is the main source of drinking water in the surrounding Subproject area. People of the Subproject have access with communication facilities mainly through mobile telephone services. The nearest and easily accessible equipped health facility to the proposed Subproject is in Manma Bazaar i.e., Kalikot District Hospital located at 500 m distance from tapping point. The main occupation of people in the area is agro base with nearly 67% contribution followed by small trade and business/enterprises and services.

Potential Impacts and Mitigation Measures: Civil works will be involved with temporary impacts on air, noise and water quality and occupational and community health and safety; particularly related to working with electricity and in the context of the COVID-19 pandemic. Long-term impacts, although insubstantial, during operation and maintenance include occupational and community health and safety risks related to the presence of electricity infrastructure. The potential environmental issues and mitigation measures identified in screening and the preparation of ESMP report will be addressed during the compliance monitoring carried out by the safeguard team. The land requirements for the substation and the pole erection there will be no any issues. Since the proposed substation land is government land and for the distribution line people have suggested to install poles at the edge of farm-lands, without affecting any private structures along the distribution line. The implementation of the proposed Subproject needs 4.234 ha of forest area with estimated loss of 698 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. The compensatory plantation will be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019) in the ration of 1:10. The ESMP cost estimated for the Subproject is NRs 13,00,000.00 associated to mitigation measures and monitoring activities. NEA Project Implementation Unit has agreed on the estimated cost for the mitigation measures and monitoring activities.

Environmental and Social Management Plan: The ESMP serves as a guide to implement environmental and social mitigation measures and responsibility of the concerned agencies during the construction and operations of the Subprojects. Monitoring and inspection of the environmental and social activities will be carried out by Environment and Social Management Unit and Project Supervision Consultant of PIU. ESMP will be an integral part of the contractor's Bidding document which will be updated by the contactor during the sub-project construction period.

Institutional Arrangements: To ensure the full compliance to the ESMP, institutional arrangement for monitoring and reporting has been proposed. All the resources needed for the implementation of ESMP for the construction and operation phase will be provided by the PIU. Project Supervision Consultant's with Environmental and Social Safeguard Specialist

will be responsible for compliance monitoring activities during the construction phase. Environment and Social Management Unit of NEA will provide regular updates to the site offices regarding the implementation of ESMP. Contractor shall prepare an Environment, Health and Safety (EHS) plan approved by the PIU before field mobilization. Contractor should mobilize a safety officer at each work site during the construction period.

Public consultation: Public consultations have been conducted in the Subproject area. People in the Subproject area noted that electricity service is poor with frequent interruptions. People have suggested to install poles at the edge of farm-lands, and project components should not affect any house and structures along the line. The impacts on the crops while stringing of lines should be minimized. Prospective electricity consumers and people to be affected are supportive and have recommended for quick implementation of the project.

***Grievance Redress Mechanism (GRM)*:** A Grievance Redress Mechanism (GRM) are established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental issues at Subproject level. In each Subproject, three levels Grievance Redress Mechanism shall be established. During the ESMP study period NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the Subproject level.

Conclusion: The environmental impacts envisaged from the implementation of proposed Subproject are site specific, short term, temporary and reversible in nature. The Subproject will provide significant benefits to people and economy by providing the reliable and improve electricity supply. The implementation of the proposed Subproject needs 4.234 ha of forest area with estimated loss of 698 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. This ESMP is considered sufficient to mitigate the environmental and social issues identified for the Subproject and will be updated during the Subproject construction stage.

1. INTRODUCTION

1.1 Project Background

The proposed Distribution System Upgrade and Expansion Project (DSUEP) will enhance the distribution system to improve reliability and quality of electric supply in the Karnali Province. The project aims improvement in voltage level and reduction in power loss which in turn will improve Nepal Electricity Authority's (NEA) financial health, improve electricity supply reliability, and reduce dependence on petroleum-fueled accessories. Government of Nepal (GoN) has envisaged DSUEP to extend the reach of 33 kV and 11 kV distribution lines "to achieve affordable electricity fulfilling the demands at the local levels for all the households by 2022". Asian Infrastructure Investment Bank (AIIB) is financing a loan to upgrade existing and build new distribution systems in Lumbini Province and Karnali Province of Nepal. This ESMP is prepared for Manma-Raskot distribution line Subproject of DSUEP.

This Subproject has three major components:

Component 1: construction, extension and augmentation of distribution lines and substations, especially 33 kV lines and 33/11 kV substations.

Component 2: construction of 11 kV lines, distribution transformers, and Low Voltage (LV) lines for new power distribution facilities.

Component 3: Capacity Building, Project Implementation Support, and Technical Assistance.

1.2 Scope of Study

This study ensures that the project meets the requirements of Nepal Government's Environmental Regulations and Environmental and Social Policy (ESP) & Environmental and Social Standards (ESSs) of AIIB. This report provides the measures for environmental and social management, monitoring and reporting of the project.

1.3 Objective of ESMP

The Environment and Social Management Plan aims to sets out the measures required to maximize the benefits of the project; and to avoid, minimize and mitigate any adverse environmental and social impacts caused by the project. The objectives of this ESMP are to:

- Describe the existing natural and socio-economical resources in and surrounding Subproject area;
- Based on existing environmental conditions, identify and assess potential significant impacts during project preconstruction, construction, and operation & maintenance stages;
- Identify and recommend mitigation measures to minimize any potential impacts caused by Subproject activities;
- Identify the local concerns on environmental and social issues and address them;
- Develop environmental management plan and monitoring plan including cost;

- Recommend institutional arrangement, including capacity building to ensure proper environmental and social safeguards implementation during construction and operation phases.

1.4 Legal Provision for the ESMP

According to the E & S safeguard Screening report, safeguard risks/issues identified as Category III (ESMF) which trigger for the preparation of ESMP to execute the Subproject. This Subproject has minimal or no adverse environmental and social impact; does not physically displace any family; and does not result in economic displacement of more than 10% of productive assets for any family.

Pertaining to Rule 3 (1), Environment Protection Act (EPA), 2019 describes completing Environmental Studies as per Schedule 1 or 2 or 3 under Environment Protection Regulation (EPR) 2020 (First Amendment in 2021/05/24 on Nepal Gazette), detailed environmental studies Brief Environmental Study (BES) or Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) is required. For this Subproject, pertaining to Rule 3(1), EPA (2019) describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1) under EPR (2020) state “use of forest area for the electricity distribution line project up to 66 KV”. The proposed Subproject will intercept the Subproject will use the of Kot Durbar Community Forest (CF), Nainatal CF, Bhumiraj Mela CF, Chotibagar CF, Salleri CF, Amardev CF, Chulenidanda CF, Nainalmandu CF, Naba Jyoti CF, Koirel Patal CF, Ramalmasta CF, Aulaghari CF and National Forest land area for the purpose of 33 kV distribution line extension and substation construction. Thus, as per EPR (2020), a BES is mandatory for the proposed Subproject.

1.5 Methodology for the ESMP

The methodology that was followed while conducting the ESMP study is as follows:

i. Literature Review: Review of published literature were conducted, with priority given to publications of government institutions as well as international organizations, to collect information on project surroundings. The Municipality/RM and its Ward profiles are used to collect the socio-economic baseline information of the Subproject. National policies, legislative frameworks and Multilateral Development Bank (MDB) policies were reviewed to understand the priorities and any legally binding requirements were studied that should be complied with while implementing the project. The Legislative provisions relevant to the project are listed in **Annex 4**.

ii. Field Survey and Investigation: Field surveys were conducted to generate information on the physical, biological and socio-economic environment of the project area. The physical environment; air quality data was monitored by Temtop Airing-1000 PM Detector, noise level by UNI-T UT 353 Mini Sound Meter (dB) and water quality by EXTECH ExStik II DO600. Field observation of the core project area and the surrounding vicinity (500m) of project footprint area was applicable for the biological assessment. trees presence within the RoW of the proposed distribution line. A total of 2 different sample quadrate were used and trees numbers were estimated by extrapolation within RoW. The total enumeration of the trees to be cleared for the

implementation of the Subproject will be estimated during the BES study. The tree clearance approval is made once the Brief Environment Study (BES) is approved from the Ministry of Energy, Water Resources and Irrigation. Priority was given to the consultation with local communities at substation sites and the settlement areas that benefit from the project. Pertaining to Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019), BES report will be prepared. NEA/PIU must take approval from Government of Nepal, for the use of forest on the implementation phase. As per section 17 (3), the compensatory ratio for the loss of trees should be made in the ratio of 1:10 and require care, maintenance and upkeep of the planted trees before handover to concerned forest office after 5 years.

iii. Data Analysis: All potential Subproject impacts on physical, biological, socio-economic and cultural resources were integrated and assessed using best practice of Multilateral Development Banks, as well as compliance with national requirements. The Geographic Information System and SW Maps were used for the field assessment and analysis of the CPA and SPS data and presentation of the maps in the ESMP report. The project foot print Ward and Municipality/RM are considered for the collection of socio-economic and baseline information.

iv. Impact Evaluation: Significance of impacts are evaluated on the basis of reversibility, nature, magnitude, extent and duration of the impact. Identification of magnitude, extent and duration is as provided in the National EIA Guidelines, 1993 of Nepal. While evaluating the impacts and prescribing mitigation, maximum efforts were made to get expert opinion and input from the DSUEP's technical and safeguard consultant team.

v. Public Consultation: As per the Government of Nepal EPA and the AIIB Environmental and Social Policy (ESP), pre-notifications with subject of consultation, venue, and time were given at Subproject foot-print area, local level and affected Ward office in presence of concerned local stakeholders. Consultations were conducted in the Subproject area, at substations and the distribution line system settlement areas with local stakeholders.

vi. Report Format: The ESMP report is prepared as per the Environmental and Social Policy (ESP) of the AIIB, which contains an executive summary, a main report, and annexes as appropriate, including one on the nature and findings of consultations undertaken. All the comments and suggestions from the field consultation are mentioned in the ESMP report.

1.6 Classification of Impact Area

The National EIA Guidelines (GoN, 2050) has mentioned on the "Core Project Area", and "Surrounding Project Area" based on proximity and magnitude of the impacts due to construction and operation of the proposed project.

Core Project Area (CPA) refers to the temporary and permanent area for the proposed project construction and associated activities. It is the area where direct impacts can be

seen. For **Manma-Raskot Distribution Line Subproject**, proposed substation area with 0.67 ha and the 33 kV distribution line with 14 km length is considered as CPA. The Subproject components are located within the Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3, and 4 of Sanni Tribeni RM and Ward No. 6 of Raskot Municipality of Kalikot district. The major settlements in the Subproject area are Manma, Karapu, Regil, Raku, Luyata, Tikuwa, and Ujjyal Gau (Raskot). The distribution line stringing route passes along the right of way of the road alignment (0+000 to 0+400, 3+600 to 4+830, 5+000 to 5+250 and 13+600 to 14+200), along the cultivated land (1+700 to 3+100), along the barren land (0+400 to 0+700) and along the forest area (0+700 to 1+700, 3+600 to 4+450, 5+000 to 5+250, 5+500 to 5+560, 6+400 to 6+650, 6+750 to 10+830, 12+000 to 12+200 and 14+250 to 14+250).

Surrounding Project Area (SPA) is the immediate vicinity of the footprint location of the proposed Subproject site. SPA is the moderate and indirect impact area. For this Subproject the 33 kV distribution line will be located within the Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3, and 4 of Sanni Tribeni RM and Ward No. 6 of Raskot Municipality of Kalikot district and along with these Wards, the adjoining Wards; Ward No. 5 of Sanni Tribeni RM and Ward No.7 of Raskot Municipality of Kalikot district is considered as SPA. The impact area showing the CPA and SPA area is presented in the google map **Figure 1-1**.

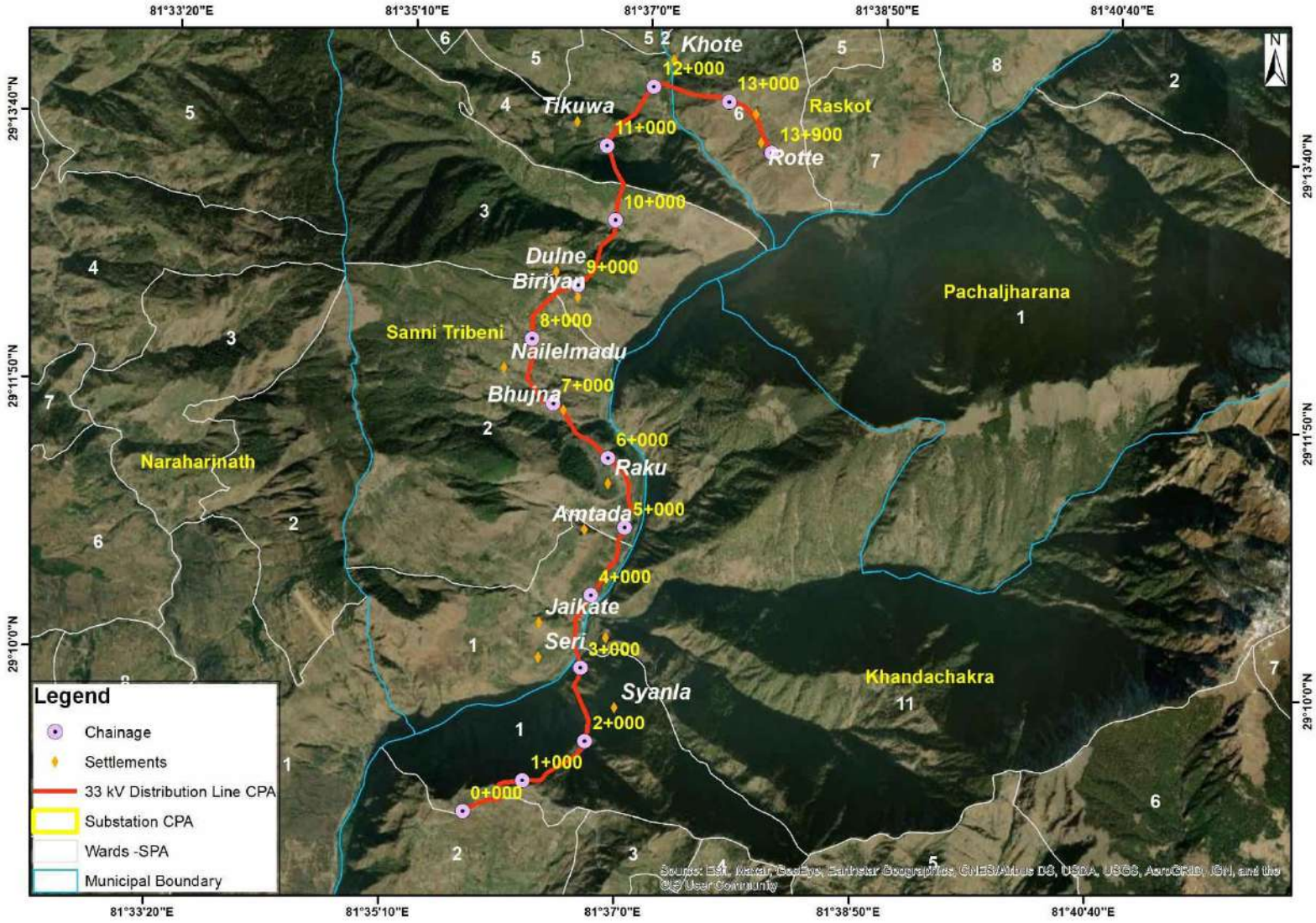


Figure 1-1: Core Project Area (CPA) and the Surrounding Project Area (SPA) Wards of the Manma-Raskot DL Subproject

2. DESCRIPTION OF THE SUBPROJECT

2.1 Subproject Location and Accessibility

The proposed **Manma-Raskot Distribution Line Subproject** is located within Khandachakra Municipality, Ward No. 1 and 2, Sanni Tribeni RM, Ward No. 1, 2, 3, and 4, and Raskot Municipality, Ward No. 6 of Kalikot district in Karnali Province. The tapping point of 33 kV line lies in Manma Substation, Khadachakra - 1, Kalikot. The proposed distribution line (33 kV) runs through Aulaghari, Amardev and Kotdarbar Community Forest land till the proposed substation location. The proposed substation is located 14 km North of tapping point. There is the accessibility of road transport within the proposed Subproject Ward area. The Subproject location and the accessibility are presented in the map below **Figure 2-1**. The main features of the Subproject are presented in **Table 2-1**.

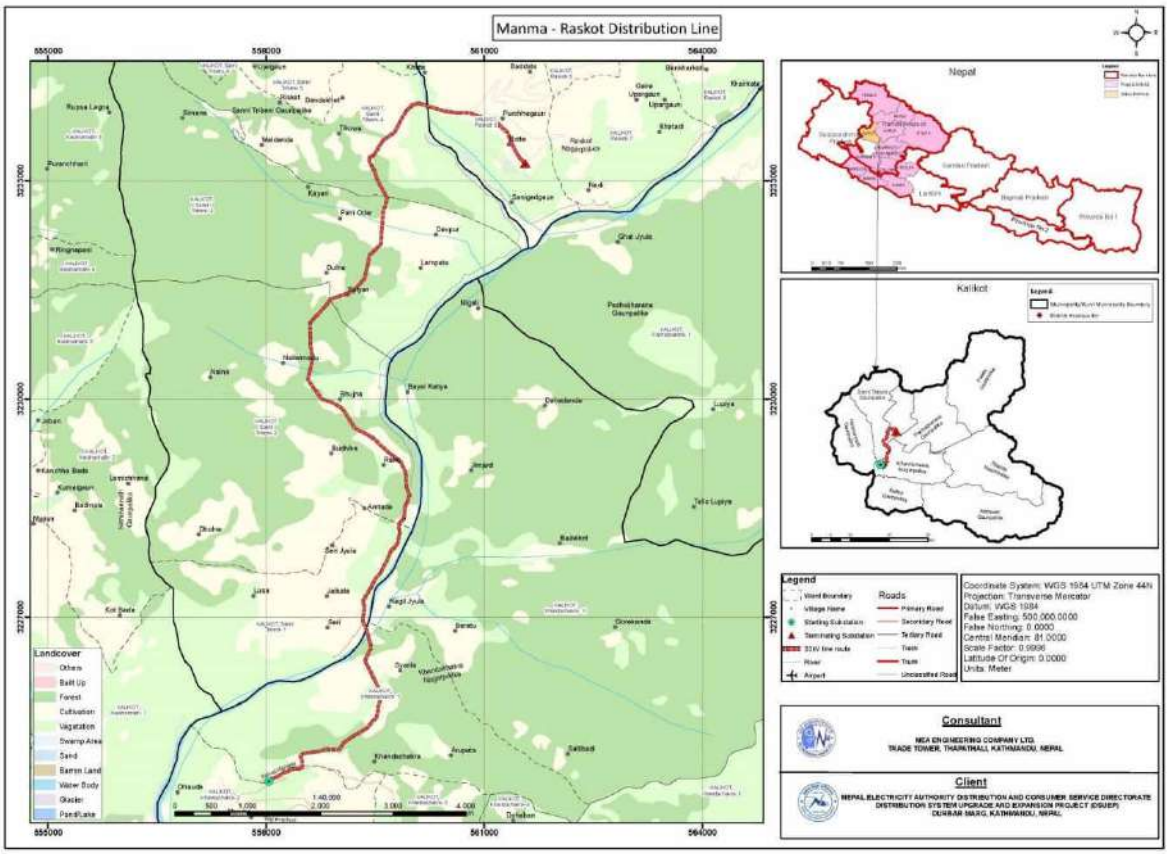


Figure 2-1: Location and Accessibility Map of Manma-Raskot Subproject[1]

[1] *Source: Department of Survey, 1995 and Field Study 2022*

Table 2-1: Technical Description of the proposed Subproject

Description	Features
Proponent	Nepal Electricity Authority
Project	Distribution System Upgrade and Expansion Project (DSUEP)
Subproject	**Manma-Raskot Distribution Line Project**
Funding Agency	AIIB
Project Location	Khandachakra Municipality (Ward No. 1, 2), Sanni Tribeni Rural Municipality (Ward No. 1, 2, 3, 4) and Raskot Municipality (Ward No. 6) of Kalikot district in Karnali Province
Distribution Line	
33kV Line Starting Point	Tapped from Existing Manma Substation, Khadachakra - 1, Kalikot, Kalikot. Co-ordinate: Lat 29°8'59.68"N and Long 81°35'48.32"E
33kV Line End Point	Raskot Substation (Proposed) at Raskot - 6, Chalnedhunga, Kalikot Co-ordinate: Lat 29°13'34.92"N, Long 81°38'0.12"E
Land type	Government/Private
System Voltage	33 kV
Max, Min System Voltage	36, 30 kV
Climatic Condition	Wind Speed: As per IS 802-1-1 Maximum Ambient Temperature: 35 ^{o}C Altitude (Min, Max): 768, 1779 masl
Length of Line/ No. of Pole	14 km/350 Poles
Right of way	6 m
Number of Circuit	1
Conductor	ACSR Dog
Line Capacity/Thermal Limit (approx.)	13.4 MW at 0.9 power factor
Type	Steel Tubular Pole with 11m/13m Height
Pole Configurations	Single Pole Structures, H-Pole Structures etc. (With and without Stay Sets)
Diameter of a Single Pole (approx.)	0.22m (As per IS 2713-3)
Planting Depth of Pole	2.2m
Insulators	Porcelain Disc and Pin Insulator
Substation	
Location	Raskot Substation (Proposed) at Raskot - 6, Chalnedhunga, Kalikot Co-ordinate: Lat 29°13'34.92"N, Long 81°38'0.12"E Elevation: 1254 masl
Land type	Government
Voltage Level	33/11 kV
Substation Capacity	8 MVA
Number and Capacity of Transformer	1 nos., 6/8 MVA
Type of Transformer	3 Phase, ONAN, Mineral Oil
Type of Substation	AIS (33kV) and Indoor (11kV)
Number of 33kV Line Bays	1
Number of 33kV Transformer Bays	1
Number of 11kV Feeders	4
Substation Area	0.67 ha

2.2 Subproject Components

The major components of the Subproject are the 33/11 kV substation and 33 kV distribution line (DL). The 33 kV DL is tapped from an existing 33 kV network line and acts as a source feeding to the proposed 33/11 kV substation. 11 kV distribution feeders emerge from the substation, eventually supplying the electricity to the consumers. The structures of the Subprojects are briefly described below.

2.2.1 33 kV Distribution Line (DL)

The 33 kV DL serves as the pathway for feeding electricity to the proposed substation. Aluminum Conductor Steel Reinforced (ACSR) type conductors are stringed on Steel Tubular Pole from the starting point of the line. In general, the 33 kV lines comprises of the Steel Tubular Poles, Insulators, Conductors and Supporting Stays. Length of distribution line is 14 km and the total number of steel tubular poles to be erected are estimated as 350

Steel Tubular Poles: Steel tubular poles will be installed in this Subproject. 11 m and 13 m long poles shall be used depending upon the location of the poles and number of circuits used in the line. The poles to be erected, will be supported by stays wherever necessary. Insulators will be installed at cross arms to support the conductor from the poles.

Insulators: The insulators provide insulation to the poles from high voltage in the conductors. Pin type insulators will be employed for suspension poles whereas disc types will be employed for tension poles. Porcelain type insulators will be used owing to its dielectric strength, better compressive strength, higher resistance to degradation, suitability for extreme climate, and environment friendly characteristics over its counterparts.

Conductor: ACSR Conductor – Aluminum Conductors Steel Reinforced, conductors with stranded layers of aluminum and steel will be used for 33 kV lines. Aluminum strands carry the current whereas the steel in between provides the mechanical strength for the conductor. Typically, 100 sq. mm conductors are used in 33 kV line for this Subproject which is also known as ACSR DOG conductor.

Stay/Guy Sets: Stay Wires are used to support or provide the balancing tension to the poles. These are made up of steel materials and can be used in multiples for a single pole, depending upon the requirements.

2.2.2 Substation

The proposed substation 33/11 kV is of capacity 6/8 MVA. The substation plays the role of lowering the 33 kV voltage level to 11 kV, which will then be stringed as distribution feeder to supply the consumers. The major component of the substation is power transformer, which is supported by the switchgear components and Civil Structures. The facility and components sample pictures are shown in **Annex 3**.

Transformers: Transformer is the major component of the distribution substation. It transforms power from higher voltage to lower voltage for distribution purpose. Power Transformers are used for the 33/11 kV substations. These transformers are mineral oil

based with ONAN/ONAF (Oil Natural Air Natural/Oil Natural Air Forced) cooling mechanisms. In existing practice, the transformers used for 33/11 kV substation in Nepal are typically of 1 MVA, 3 MVA, 8 MVA and 16 MVA depending upon the load supplied by the substation. This Subproject comprises of power transformer of 6/8 MVA ONAF type.

Electrical Switchgear: Electrical Equipment comprising of Circuit Breaker, Earth Switch, Current Transformer, Potential Transformers, etc. installed in the substation are called Electric Switchgear. They facilitate the objective of power conversion.

Civil Structures: A control building is essential for the operation of the substation. It houses the operating station, along with battery systems. Guard House and Staff Quarter are other essential buildings for smooth operation of the substation.

Switchyard, Boundary, Roads, Drainage and Essentials: The outdoor civil structure in the proposed substation includes the boundary wall, main entrance gates and Switchyard. The power transformer and components of power system are laid in the switchyard based on the prudent engineering practice. Steel structures are used to support the components as per component wise requirements. Roads are paved within the boundary as essential for the transport of power transformer and other components. The substation location also serves as site store for storage of distribution system components.

2.2.3 11 kV Lines and LT Lines

11 kV lines and LT lines take the access of electricity to the consumer households. It is why the construction of those lines are always encouraged by the local people. The line route, thus the installation of poles and lines, are envisaged to go through the edge of local roads. If any line route pass through any private lands, permission from the corresponding land owner will be taken before starting the construction of those lines.

The detailed line route survey for 11 kV and LT lines have not been done yet. The scope of detailed survey is in the scope of the construction Contractor. The construction Contractor will conduct Pre-Construction Survey (PCS) to finalize the line route of 11 kV lines and LT lines for the construction. PCS will prepare the detailed line route of those lines and submit to PIU for approval. After the detailed line route is submitted by the Contractor and approved by PIU, E&S team of Project Supervision Consultant (PSC) will conduct an E&S study and submit the findings that

- Do the lines pose any adverse Environmental or Social issues?
- If there are any Environmental or Social issue, how can they be resolved? If the lines do not pose any adverse Environmental or Social issue, the lines will be cleared by PIU after seeking concurrence from AIIB.
- If the solution measures are not implementable in the field, PCS will suggest for any other way to divert or reroute the lines? If yes, PCS will propose alternative line route. The lines will be cleared by PIU after seeking concurrence from AIIB, given that the lines do not pose any adverse Environmental or Social issue.

2.3 Major Construction Activities in the Subproject

Activities in the Subproject area can be sub-divided into three categories viz, Pre-Construction Phase, Construction Phase and Operation Phase. For the proposed Subproject, trees and bushes in the Right of Way of 33 kV lines have to be cleared whereas, no trees within the proposed substation boundary have to cleared for the construction work. The proposed Manma-Raskot Line Subproject intercept forest area of 4.234 ha. The estimated loss of trees species in the Right of Way of 33 kV lines are 698.

I. **Preconstruction phase**: The activities to be carried out before the construction phase are:
- Demarcation of land area for the proposed substation
- Receive public opinion
- Make clearance of the substation land area permanently
- Distribution line route selection
- Approval to cut down trees from the concerned government authorities

II. **Construction phase**: The activities to be carried out during the construction phase are:
- Assign the land area for temporary storage of construction materials
- Transportation of construction materials
- Leveling of land area for the proposed substation
- Cutting down of trees in Right of Way of 33 kV lines
- Construction of substation structures
- Pole erection work for 33 kV, 11 kV and low-tension distribution lines
- Stringing of 33 kV, 11 kV and low-tension distribution line

III. **Operation phase**: The activities to be carried out during the operation phase are:
- Maintenance of the substation and 33 kV distribution line route

2.4 Energy to be used

During the construction period diesel fuel will be used to power construction equipment and transport vehicles, which emits air pollutants and greenhouse gases in insignificant quantity. Use of firewood shall be restricted in the labor camp, whereas the workers shall be provided LPG for cooking.

2.5 Land Required

The **Manma-Raskot Subproject** will require about 0.67 ha land for building the substation. The land is government land and by NEA to construct the substation in the designated area. The 33 kV distribution line of 14 km length pass from private farm lands and community forest. Poles shall be installed at the edge of private farm land which will not affect the usability and valuation of the lands.

2.6 Material Requirement and Sources

A 33/11 kV substation, 33 kV, 11 kV and low-tension distribution lines will be constructed for this Subproject. Minimal excavation at the pole locations will be done to erect steel tubular poles of 11 m and 13 m. The depth of burial for 11 m (approximately 256 kg) and 13 m

(approximately 343 kg) poles are 1.8 m and 2.17 m respectively. The construction works for substation will not produce significant amount of spoils and thus it will not require spoil-dumping site. Similarly, excavation works carried out for digging pit holes for poles produces insignificant spoils which does not require management of earthworks.

Civil construction works will involve excavation for foundation of substation, steel reinforcement, cement, coarse aggregates and fine aggregates (sand). Materials will be procured from legally operating markets. The design team has provided the following estimate of construction materials required for 33 kV distribution line and the substation.

Table 2-2: Approximate Quantity of Material for 33 kV line

SN	Particular	Unit	Requirement
1	Amount of Steel	Ton/km	5800
2	M15 concrete for Pole base	Cum/km	12.5

Source: Design Report, DSUEP

Table 2-3: Approximate Quantity of Material for 33/11 kV Substation

SN	Particular	Unit	Support Structures, Road, Drainage	Control Building	Staff Quarter	Office Building	Guard House
1	M15 Concrete	cum	100	25	224	120	5
2	M25 Concrete	Cum	300	170	125	75	27
3	Reinforcement bar	Ton	7	27	20	12	4

Source: Design Report, DSUEP

2.7 Major Equipment and Power Requirements

Major equipments used during the Project implementation are:

One Excavator, One Roller, One Drilling Machine, One Crane, one Grid Supply of 100 kVA Distribution Transformer, and two 50 kVA capacity diesel generators.

2.8 Workforce Requirement

Local people in the surrounding Subproject area will be encouraged for the employment. Based on the skills (skilled, semi-skilled and unskilled labor), local people will be used for the construction and both male and female will get equal opportunity during construction. The number of human resources required depends upon the complexity of the project as well as the geographical location of the project. In case, of construction of 33 kV lines and 33/11 kV substations, the workforce typically varies from terai to hilly to mountain region. Expected number of manpower employed is enlisted hereunder.

Table 2-4: Human Resource Required for construction of 33 kV line and substation in a day of Construction

SN	Human Resource/Day	For Distribution Line	For Substation
1	Engineer (No.)	1	2
2	Supervisor (No.)	2	4
3	Foreman (No.)	3	5
4	Skilled (Lineman/Electrician) (No.)	8	10
5	Helper (No.)	5	15
6	Labour (No.)	20	30

Source: Design Report, DSUEP

2.9 Construction and Implementation Schedule

Implementation of the proposed Subproject comprises construction of a new 33/11 kV substation, 33 kV lines, 11 kV lines, low tension lines, and installation of distribution transformers. It includes construction and installation of components as mentioned in subsection 2.2. The estimated completion period is 24 Months.

Table 2-5: Construction Schedule of Project Implementation

SN	Activities/ Months	**Months** *(After the completion of Detailed Survey Study)*					
		1-3	**4-6**	**7-10**	**11-15**	**16-20**	**20-24**
1.	Invitation for tender, evaluation, and award						
2.	Implementation of Environmental and Social Safeguards						
3.	Erection of Poles						
4.	Stringing of conductor						
5.	Construction of substation						
6.	Charging and Testing						

Source: Design Report, DSUEP

3. DESCRIPTION OF THE ENVIRONMENT

3.1 Physical Environment

3.1.1 Topography and Land Use

The Subproject area lies in Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3, and 4 of Sanni Tribeni RM, and Ward No. 6 of Raskot Municipality of Kalikot district in Karnali Province. The tapping point is situated at Latitude 29°8'59.68"N and Longitude 81°35'48.32"E with an elevation of 1603 masl (**Figure 3-1**). The proposed distribution line (33 kV) of 14 km passes along Community Forest, private farm lands and RoW of Karnali highway.

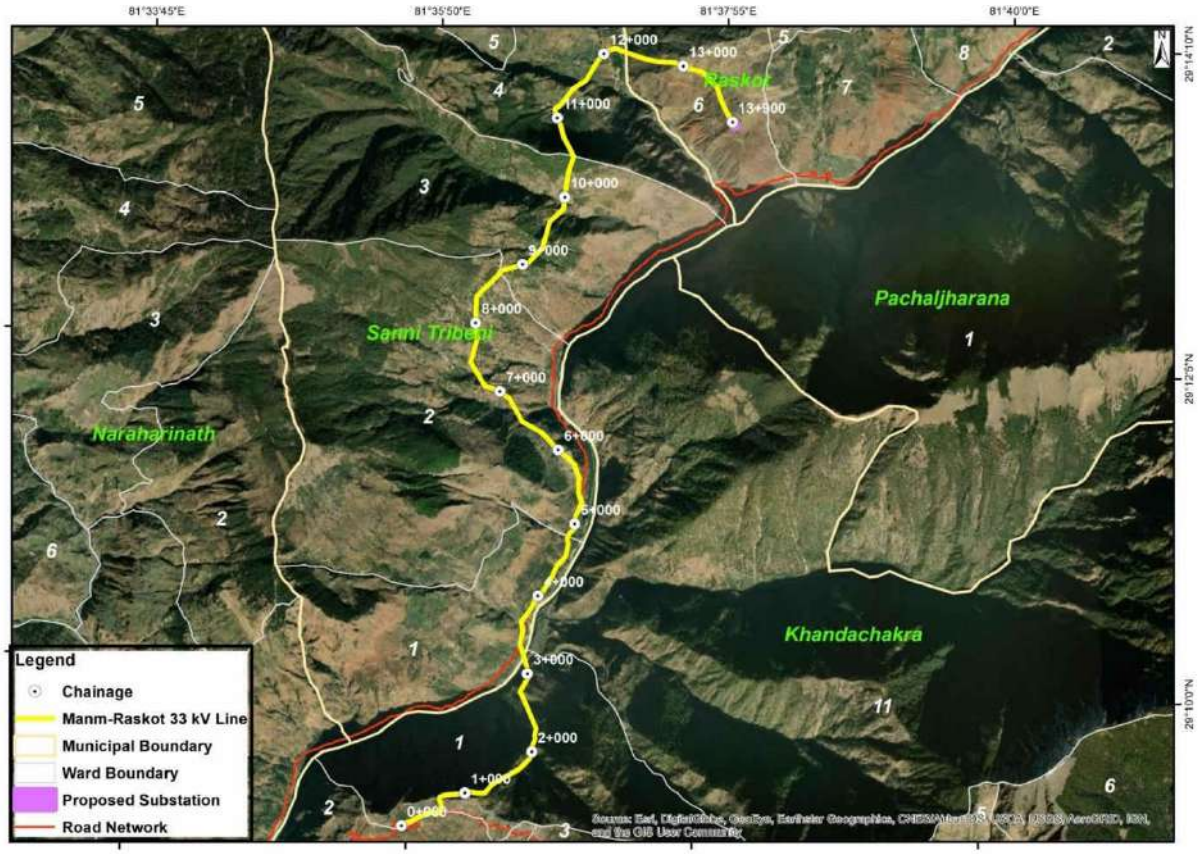


Figure 3-1: Location map and Land use details of the Subproject[2]

The substation lies at Latitude 29°13'34.92"N, Longitude 81°38'0.12"E and elevation of 1254 masl (**Figure 3-3)**. The site is primarily within the flat land with little depressed. It lies in open and clear barren land owned by GoN and managed by Aulaghari Community Forest User Group. The proposed substation boundary lies within 0.67 ha area. None of the private and public entities will be affected due to the implementation of the proposed Subproject, as it will be installed within the RoW of existing road and the edges of the private farms land. The land use map details with the components of the Subprojects are presented in **Annex 2**.

[2] *Source: Topographic Map, Department of Survey, 1995 and Field Study 2022*



Figure 3-2: Tapping point (Khandachakra Municipality Ward No. 2)



Figure 3-3: Manma-Raskot Substation View

3.1.2 Geology

The proposed 33 kV distribution line runs between the Armed Police Forece (APF) office and the sub division forest office from the start substation (Manma), passing through a colluvium deposit of weathered coloured gneiss rock. The line runs from the jail way, where there is weathered coloured gneiss of grey color to the community forest, where the soil is residual and gneiss and quartzite angular aggregates are contained. It also crosses the Karnali River, where a strong foundation is needed on both banks, and the rock is milky white quartzite with patches of copper (Malachite). Discovered the road cut profile with silty clay and gneiss boulders and gravel before terminating at the end substation. Geologically, it lies on the Kalikot Formation of the Higher Himalaya rock of the Precambrian rock age. The rock is composed of weathered colored gneiss 1-5 cm in thickness with quartzite vein 3-5cm in thickness and foliation NE.

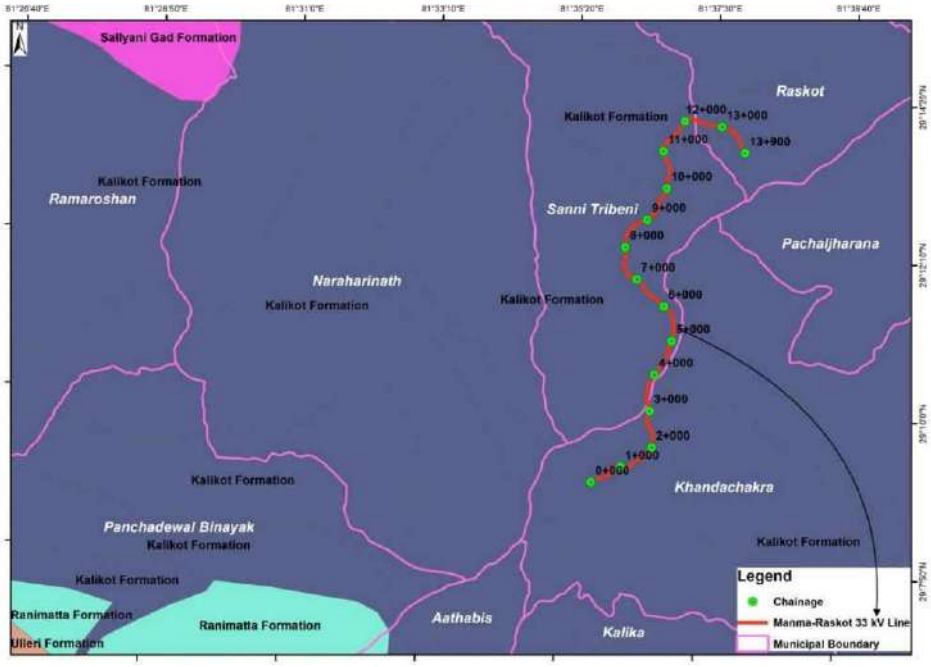


Figure 3-4: Geological Map of proposed Subproject Area[3]

[3] *Source: Department of Mines and Geology (DMG), 2020*

3.1.3 Seismology

The entire country of Nepal is in a seismically active zone caused by subduction of Indian tectonic plate under the Tibetan Plate. According to National Seismological Center of Nepal several big earthquakes have been felt in Nepal, the earthquakes of magnitude 6 to 7 are mostly confined to the Main Himalayan Thrust (MHT) between the foot hills and the Higher Himalaya. Moreover, earthquake generation is confined to the crustal depth of 20 km. However, shallow earthquakes at depths down to 6 km are generated as a result of strike slip faults. Therefore, the substations and distribution lines of this Subproject will be designed and operated in accordance with seismic design requirements and best engineering practice. The seismic activity in Nepal between 1964 and 2019 as in IUSGS portal is shown in **Figure 3-5**.

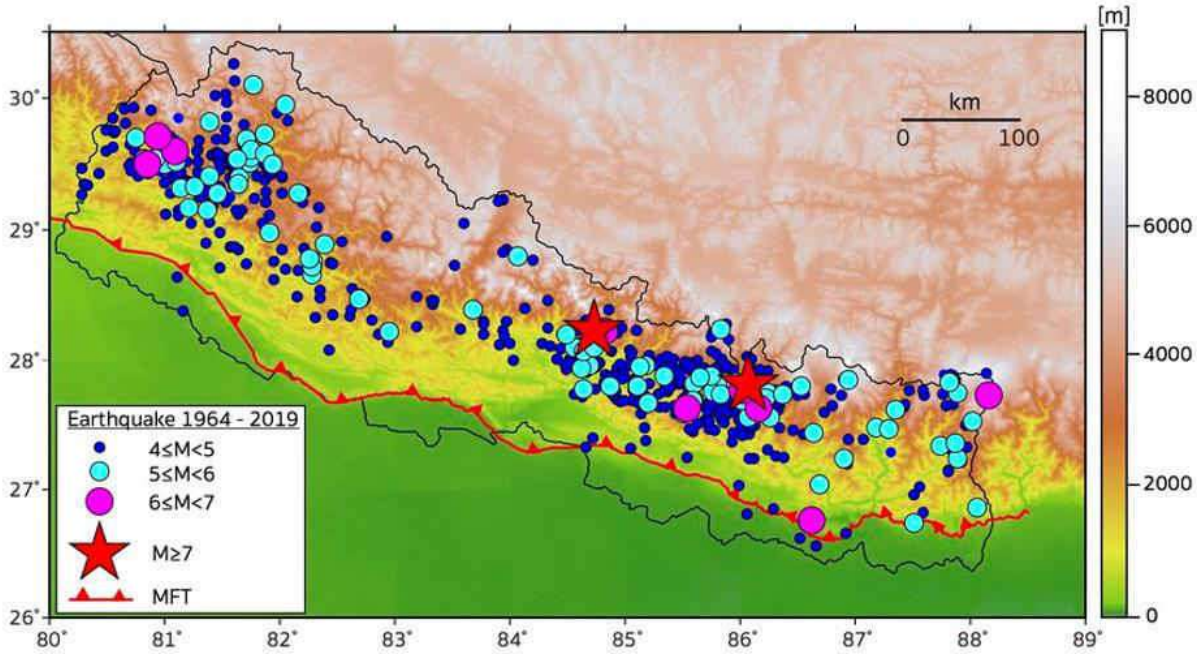


Figure 3-5: Seismicity map of Nepal from 1964 -2019[4]

3.1.4 Climate

The climate of the Subproject area is sub-tropical. According to DHM 2019 temperature at the project valley varied from 10 °C to 35°C. The relative humidity is in the range of 84% to 87 %. The average annual rainfall is estimated at approximately 1868 mm per year. Almost 80% of rainfall occurs during monsoon (June to September).

3.1.5 Air, Noise, Water Quality and Polluting Sources

The major air polluting sources recorded are only from vehicular emission and dust problem from plying of vehicles and high wind velocity. Noise polluting sources noted at the time of field study are similar to the air polluting sources. Unnecessary honking along the access

[4] *Source: USGS catalogue, 2019*

road of site is the source of noise generation. Following table shows the real-time quality of air and noise during field study.

Table 3-1: Ambient Air and Noise Quality within the Proposed Subproject Site

SN	Location/ Chainage	**Air Quality**[5]**-**Temtop Airing-1000 PM Detector (µg/m^3)					**Noise Level -**UNI-T UT 353 Mini Sound Meter (dB)		
		$PM_{2.5}$	**Level**	**PM_{10}**	**Level**	**Average Time of Measurement**	**Measured**	**Ref.**[6]	**Area**
1.	Tapping Point	13.6	100	15.8	200	1-hour	34	50	Residential Area
2.	Substation	18.4		12.4			30		

Source: Field Visit, 2022

The air quality and noise level of the SPA was found within the range of National Ambient Air Quality Standard and Noise Quality Standard, respectively.

The DL also crosses the Karnali River, where a strong foundation is needed on both banks. At the Regal, the line ascends from the cohesive soil to meet at the Sanighat, where the rock is medium to thick bedded gneiss, crosses the Sannigadha Khola and returns to the cultivation land. The construction activities of the Subproject components will not have impact to the local stream.

[5] *National Indoor Air Quality Standard, 2009*

[6] *National Ambient Sound Quality Standard, 2012*

3.1.6 Solid Waste Management

Wastes were found littered in front of HHs and along the side of the access road near Subproject areas. People of the nearby area were found managing organic wastes within the household premises. Recyclable waste (large quantity) was sold to scrap collector occasionally. The estimated quantity of solid waste generation from the labor camp is shown in **Table 3-2**.

Table 3-2: Estimated Daily Solid Waste Generation from Campsite

SN	Description	Calculation	Remarks
1.	Total Labors within the Campsite	= 20 Labors	
2.	Total Waste Generation to be Expected	= 20 * 123.62 g/capita/day = 2472.4 g/capita/day = 2.4724 kg/day	
3.	Organic Waste Composition Responsible for Foul Smell, and Rodents	= 1.26 kg/day	Assuming 51% organic waste
Rest other waste is recyclable, and non-decomposable which could be stored for long period, and have less impact on the environment if properly managed. The amount of organic waste is manageable within the Subproject site as organic waste per day will be expected to be only 1.26 kg/day.			

3.2 Biological Environment

The proposed Subproject's distribution line of passes along Kot Durbar Community Forest (CF), Nainatal CF, Bhumiraj Mela CF, Chotibagar CF, Salleri CF, Amardev CF, Chulenidanda CF, Nainalmandu CF, Naba Jyoti CF, Koirel Patal CF, Ramalmasta CF, Aulaghari CF and National Forest land till the proposed substation location. The proposed substation area land is Government and managed by Aulaghari Community Forest of Raskot Municipality. The proposed Subproject lies at an elevation in the range from 768 to 1779 masl in sub-tropical bioclimatic zone. The proposed Subproject development site does not lie within any protected area and conservation area.

The floral species recorded during the screening field visit are Chir Pine (*Pinus roxburghii),* Baaj *(Quercus sp.),* Dabdabay *(Garuga pinnata),* Karam *(Haldina cordifolia),* Sindhre *(Mallotus philippinesis),* Mallato *(Macaranga pustulata),* and Tooni *(Toona ciliata).* Similarly, wild animal recorded during the public consultation are Barking Deer (*Muntiacus muntjak*), Marsh Rabbit (*Sylvilagus palustris*), Jackel (*Canis aureus*), Malayan Porcupine (*Hystrix brachyuran*), Ghoral (*Naemorhedus goral*), Common Leopard (*Panthera pardus*), Red Monkey (*Macaca mulatta*), Wild Boar (*Sus scrofa*), and Yellow Throated Martin (*Martes flavigula*). Altogether ten species of birds were noted around the surrounding project area House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* Jureli *(Hypsipetes leucocephalus),* Rock Piegon *(Columbia lebia),* Chyakhura (*Alectoris chukar),* Kalij (*Lophura leucomelanos)* and Eagle *(Haliaeetus leucocephalus).*

The proposed Manma-Raskot 33 kV distribution line passes through the 13 different community forests as shown in **Table 3-3**. A total of 4.234 ha of the forest area will be occupied by RoW of proposed 33 distribution line. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 698.

Table 3-3: The community forest along the proposed 33 kV distribution line

SN	Name of Forest	Chainage	District	Municipality/RM	Ward
1	Kot Durbar CF	0+700-1+200	Kalikot	Khadachakra Municipality	1
2	Nainatal CF	1+200-1+700	Kalikot	Khadachakra Municipality	1
3	Bhumiraj Mela CF	3+600-4+450	Kalikot	Sannitribeni RM	1
4	Chotibagar CF	5+000-5+250	Kalikot	Sannitribeni RM	2
5	National Forest	5+500-5+560	Kalikot	Sannitribeni RM	2
6	Salleri CF	6+400-6+650	Kalikot	Sannitribeni RM	2
7	Chulenidanda CF	6+750-7+650	Kalikot	Sannitribeni RM	2
8	Nainalmandu CF	7+650-8+650	Kalikot	Sannitribeni RM	2
9	Nainalmandu CF	8+650-9+000	Kalikot	Sannitribeni RM	3
10	Naba Jyoti CF	9+000-10+400	Kalikot	Sannitribeni RM	3
11	Koirel Patal CF	10+400-10+830	Kalikot	Sannitribeni RM	4
12	Ramalmasta CF	12+000-12+200	Kalikot	Sannitribeni RM	4
13	Aulaghari CF	14+250-14+250	Kalikot	Raskot Municipality	7

3.3 Socio-economic Environment

Demography and Ethnic Compositions: The proposed Subproject area lies in Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3 and 4 of Sanni Tribeni RM, and Ward No. 6 of Raskot Municipality. Manma Bazaar is the nearest business markets nearby the Subproject area. The general demographic information of the affected Municipality is presented in Table 3-3. The major ethnic compositions within the surrounding project area i.e., Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3 and 4 of Sanni Tribeni RM, and Ward No. 6 of Raskot Municipality are Thakuri is 33.3%, Chhetri is 28.7%, Bhramin is 18.8%, Tharu is 15.4% and Magar is 2.4% of the total population of 14,954. Majority of people follow the Hindu religion and rest follow Buddhism and Christian religion. The Core Project Area (CPA) of the Subproject will not affect any indigenous people.

Table 3-4: General Demographic Characteristic of Subproject Municipality

S.N.	Local Level	Ward No.	HH	Population		
				Male	Female	Total
1	Khandachakra Municipality	1	921	2335	1957	4292
2		2	565	1591	1519	3110
3	Sanni Triveni RM	1	251	793	760	1553
4		2	268	800	819	1619
5		3	222	645	647	1292
6		4	265	749	796	1292
7	Raskot Municipality	6	286	837	903	1796

Total	**2778**	**7750**	**7401**	**14954**

Source: (CBS, Rural Municipality-Municipality Profile of Kalikot District, 2018)

Road Accessibility: Subproject-Ward No. 1 and 2 of Khandachakra Municipality, Ward No. 1, 2, 3 and 4 of Sanni Tribeni RM, and Ward No. 6 of Raskot Municipality is connected with Karnali Highway Road (Siradi-Sherighat-Manma Section). The transportation facilities in this locality are good. It will take just 30-45 minutes to reach Municipality/RM office from the Subproject area.

Electricity Beneficiaries: The implementation of the Subproject will increase the electricity beneficiaries to 7157 HHs, 30 commercial purposes and 10 industries. This will expand the electricity supply in the Subproject area with clean energy sources.

Water and Sanitation: Tube-well and tap/piped water is the main source of drinking water in the surrounding Subproject area. The people living in the plain area have tube-well and the side area is facilitated by the tap water system. The local bodies have already declared as open defection free area, and because of this initiative, almost all the houses in the area have some sort of toilet facility.

Health Facility: The nearest and easily accessible equipped health facility nearby the proposed Subproject area is in Manma Bazaar i.e., Kalikot District Hospital located at a distance of 500 m from tapping point.

Communication: People of the Subproject have access to communication facilities mainly through mobile telephone services. In the Subproject area, people have access to local and national FM Radio networks and local newspaper facilities.

Occupation: Agriculture is the main occupation of people in the Subproject area with nearly 67% contribution; small trade and business/enterprises and services are other occupation of people in the Subproject area. Intermittent tripping and voltage drop of electricity was adversely affecting irrigation of crops and daily household chores activities.

COVID-19: The coronavirus (COVID-19) pandemic has been defined as global health crisis; the virus has spread in almost all parts of Nepal. Heedful of its vulnerabilities, the Government of Nepal had enforced a nationwide lockdown in 2020/2021 and activated its federal, provincial and local level mechanisms to respond to the crisis. In case of any sudden surge or outbreak of COVID-19, quarantine facilities and immediate health support should be provided to the workers and personnel involved in construction.

Other seasonal and minor diseases like dengue, fever, sneezing, cough, gastritis, diabetes and mental disorder have been reported within the Subproject area.

4. ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

The environmental and social impacts predicted during the construction of proposed Subproject are discussed in this chapter. National Environmental Impact Assessment Guidelines (GoN, 2050) has been referred for the predicting magnitude, extent, and duration of the project-induced environmental impacts in Subproject area. This chapter identifies the basic environmental and social impacts in the Subproject area that will arise during the construction. The detailed impacts of each domain of environmental and social safeguards have been addressed in this chapter.

4.1 Anticipated Beneficial Impacts

Construction Phase

4.1.1 Local Employment

Local employment will be created during the construction phase. As mentioned in section 2.8 Workforce Requirement, the typical construction team will have 27 skilled manpower and 78 unskilled manpower for the period 10-12 months for the erection of poles and stringing the distribution lines and 16-18 months of time for the building the substation. Local people within the SPA and OPA will be encouraged for employment during construction phase. Both male and female will get equal opportunity during construction. Based on the skill levels (skilled, semi-skilled and unskilled labor) local people will be used for the construction as far as possible. *The magnitude of impact is considered moderate, the extent is local, and the duration is short-term.*

Operation Phase

4.1.2 Local Economy and Enhancement in Rural Electrification

The local economy will benefit through improved reliability of electricity supply, which is a necessary condition for economic growth. Different industries within/nearby the proposed Subproject area will be established. Intermittent tripping and voltage drop problem nearby the settlement areas will be reduced. Upgrading and expansion of electricity distribution helps to way-out many electricity related issues and promotes the use of new types of home appliances, use of electric motors for irrigation, and establishment of small and large industries. *The magnitude of impact is considered high, the extent is local, and the duration is long-term.*

4.1.3 Greenhouse Gas Emission Balance

Net Green House Gas (GHG) emissions resulting from the Subproject area are expected to be low as the distribution lines will improve and expand electricity supply from clean energy sources. It will reduce the emission of GHG from the traditional source like Guitha (made from cow dung), firewood and timber along with commercial fuel Kerosene for cooking/lighting, heating and diesel for water pumping. *The magnitude of impact is high, the extent is local, and the duration is long term.*

4.2 Anticipated Adverse Impacts

A. Physical Environment

Construction Phase

4.2.1 Change in Land Use

The Subproject requires about 0.67 ha land for the substation. The proposed substation land area belongs to Aulaghari Community Forest User Group, i.e., government land. The land will be managed by NEA and will be converted to the substation area surrounded by proper boundary wall. Distribution Line passes parallel to the Karnali highway up to District Jail Office of Kalikot then passes through gulley followed by community forest and agricultural land. The construction of the Subproject will bring change in land use permanently. Potential impacts caused by distribution lines will be limited to approximately 0.22 m of land for each pole, at the edge of roads and cultivated lands. *The impacts due to use of land will be moderate in magnitude, site specific and long term in duration.*

Mitigation Measures

- Steel Tubular Pole for distribution lines will be planted at the right way of existing road without hampering traffic movement. In case of cultivated land, minimal land will be used at the edge for planting the poles.
- Cropping calendar will be followed while planting poles and stringing of conductors so that standing crops will not be damaged.
- In case of loss of standing crops, compensation will be made to the respective land owner as per the prevailing market rate.

4.2.2 Erosion and Landslide

The proposed Subproject area distribution line is nearby the Karnali River and Sanigadha Khola and is susceptible to high erosion and landslide from during rainy season. The distribution line length is 14 km and about 2 km length passes nearby and parallel to the Karnali River, adjoining edge of private land. Then, it will pass through RoW of local feeder road up to the proposed substation at Raskot - 6, Chalnedhunga. Possible landslide and erosion may result nearby the distribution lines alignments. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long-term.*

Mitigation Measures

- Concrete foundation is recommended for Steel tubular pole installation for 33 kv lines.
- Pit hole prepared for the installation of steel tubular pole shall not be left open as possibility of accident may arise.
- Protection works along the eroded section of the Karnali River at 2 km of the distribution line stretch.
- The client needs to coordinate with local level governments and request the local government to give priority for the embankment activities for the protection of cultivated land and proposed 33 kV distribution lines.

4.2.3 Air Quality

The impact on air quality during the construction period is expected to be insignificant, as site clearance, excavation, stockpiling of construction materials, waste burning at camp

sites and equipment installation are localized and of short term. Transportation of the materials and movement of construction crew and equipment will have minor impact on air quality. *The impact on air quality will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors' vehicles and equipment should meet Nepali vehicle emissions standards.
- Dust emissions shall be controlled with using water sprays on earthen roads nearby settlements in substation area.
- Open burning of wastes should be strictly prohibited.
- Construction workers should use face masks at all times.
- All dust generating loads carried in open trucks should be covered.

4.2.4 Noise

Noise is inevitable during construction. As noted in section 3.1.5, noise is less around the substation area as the area is rural and settlement is sparse. Construction-related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites; construction related noise is not expected to exceed acceptable levels. *The impact on noise level will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors will be required to monitor noise during the construction.
- For substation site, boundary walls serve as noise barrier, and it should be constructed as early as possible.

4.2.5 Drainage and Water Quality

Substation sites of 0.67 ha. will result in slight alteration of drainage patterns, although the alterations in drainage will not be quantifiable. Interference with drainage patterns will be temporary during construction phase only. The impact on water quality during the construction period is expected to be insignificant. Water will be used primarily as a cement additive for construction of substation foundations and boundary walls, and to control dust. *The magnitude of impact is considered low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Storm water run-off from substation sites will be minimized and controlled with bunding temporary dikes (constructed boundary walls will also help contain run-off water).
- Proper management of ground drainage from camps as a preventive measure against breeding places of mosquitoes, and other pests.

4.2.6 Soil and Muck

As the proposed substation land's ground level is low, filling of soil is necessary. The required filling materials shall be purchased from nearby authorized crusher plant approved by local government. For distribution lines the excavation activity will be insignificant. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Soil required for filling shall be purchased from the nearby authorized crusher plant under local government.
- Soil shall be covered with tarpaulin while transporting it from earth-borrowing areas.
- Simultaneous water sprinkling and compaction of spoil shall be done using the roller.

4.2.7 Solid Wastes

The wastes generated during construction within the Subproject area are cement bags, iron bars, and other leftover construction materials, and waste generated by the labor camp. It might cause adverse impact if not properly managed. Organic wastes generated from labor camp may give foul smell, and attract rodents if not manage properly. Inorganic wastes generated during implementation shall be managed through source segregation. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Source segregation of organic and inorganic wastes in different storage areas or facilities in the designated location.
- The organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered by thick layer of soil on daily basis.
- Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix shall be used as refills for ground leveling.
- Packing materials used for casing components should be recyclable.
- Recyclable wastes like left out/non-usable reinforcement bars and packing materials shall be sent or sold to scrap vendors.
- Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container and sealed carefully.

Effective coordination shall be done with local level government for proper waste management during construction period.

4.2.8 Electric and Fire Hazard

Employees performing servicing or maintenance of substations may be exposed to electric shock, burns and injuries from the unexpected energization or release of stored energy in the equipment. *The magnitude of impact is considered moderate, the extent is site-specific, and the duration is long term.*

Mitigation Measures

For this, the following mitigation measures will be practiced:

- Use of insulation, guarding, grounding, electrical protective devices, and safe work practices is advised.
- Boundary walls and security fences around substation are recommended to prevent unauthorized access.
- Only trained and authorized personnel shall be allowed for electrical works.
- Warning signs shall be installed.

B. Biological Environment

The proposed Subproject avoids forest area and other sensitive biodiversity area. Hence, there will be no significant impact to biological environment because of construction of substation and distribution lines.

Construction Phase

4.2.9 Loss of Habitat

As the proposed substation area is a barren land, whereas the 33 kV distribution line passes through the edges of road alignments, farm lands and forest areas. The total area of the forest area that will be occupied within RoW of the proposed 33 kV distribution line and substation area is 4.234 ha. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 698. The possible use of firewood should be restricted during the construction activities. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long term.*

Table 4-1: Detail of impacted forest area and trees loss

Area (ha)			Name of species	No. of trees	
33kV line	**Substation**	**Total**		**33kV line**	**Substation**
3.564	0.67	4.234	*Quercus sp.*	17	-
			Garuga pinnata	18	-
			Macaranga pustulata	102	-
			Haldina cordifolia	170	-
			Mallotus philippensis	18	-
			Pinus roxburghii	340	-
			Toona ciliata	34	-
			Total	698	-

Mitigation Measures

- Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019).
- Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.
- Labors and staffs should be restricted to use firewood for cooking.
- **Operation** Providing LPG based stoves in Labor camp.
- Labors and staff shall be made aware to avoid illegal activities in adjoining forest.

Phase

4.2.10 Bird electrocution and collision

The Subproject area is located in a rural setting and there is no presence of critical habitat of avian fauna. Electrocution is a risk to bird species that perch on power line

infrastructures (substations and distribution lines). List of birds presented in section 3.2, may collide to distribution lines and substation. Minimizing bird collision and electrocution risk is therefore a win-win for biodiversity and the power sector. *The magnitude of impact is low, the extent is site-specific, and the duration is long term.*

Mitigation Measures

- Bird guards should be installed above the poles and white spirals in the conductors to improve visibility electrical structures.

C. Socio-Economic and Cultural Environment

The anticipated impacts regarding the socio-economic and cultural environment associated with Subproject are discussed below:

Construction Phase

4.2.11 Land Requirement

The land required for the proposed substation area is 0.67 ha and is the government land, used by Aulaghari Community Forest User Group. This has been confirmed officially through Community Forest User Group and Ward Office, Raskot Municipality. The proposed physical activities of the Subproject will not be involved in private land. Therefore, there will be no land acquisition and resettlement impacts. In case of 33 kV distribution line, 14 km length which pass parallel to the Karnali highway up to District Jail Office of Kalikot then passes through gulley followed by community forest and agricultural land. The impacts on the crops while stringing of lines should be minimized. During the public consultation people have agreed to support the implementation of the Subproject (**Annex 5**). Compensation shall be made on the basis of crops types and quantity of loss equivalent to the market price. *The impacts will be low in magnitude, site specific and long term in duration.*

Mitigation Measures

- Distribution pole of diameter 0.22 m should be installed on the edge of cultivated land making no loss of standing crops.
- If there is loss of crops, appropriate compensation shall be made.

4.2.12 Public Health

Construction activities will be of small scale, causing no significant adverse impact to existing quality of air, water and sound. Local people except the workers do not involve in construction activities. Considering COVID-19 pandemic as an example, workers will be advised to avoid unnecessary contact with local people. *The magnitude of impact is low, the extent is site-specific, and the duration is short term.*

Mitigation Measures

- Contractors shall implement health and safety plans.
- Awareness on HIV/AIDS and other sexually transmitted disease should be provided to the labors.
- Awareness on basic sanitation and waste management should be provided to the labors.

4.2.13 Occupational Hazards and Safety of Workers

Occupational health hazard and safety of workers is the major issue during the construction period. Working without adopting safety measures during excavation work, spoil management work, mechanical and electrical equipment handling activities, chemical handling, etc. during construction may call the risk of accident. Primary victims are the workers involved in the construction. *So, the envisaged direct impact is high in magnitude, site specific in extent, short term in duration.*

Mitigation Measures

- Contractor shall prepare the Environmental, Health and Safety plan and take approval from the Client (NEA/PIU). Contractor shall employ Safety officer during construction period.
- All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. The Contractor will adhere to labor Act 2074 and Labor Rules 2075.
- The basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid are required for the campsite.
- All the workers shall have health insurance over the period of construction.
- Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs) as shown in ***An*nex 7**.
- NEA will be responsible to supervise the EHS performance of the construction Contractor, and worker's health and safety.

4.2.14 Child Labor, and Gender Issues

During the construction period, people employed on daily wages for excavation, transportation of construction materials, and other construction-related works should avoid the involvement children and should avoid gender discrimination. Gender discrimination may occur as the Contractor may not be sensitive towards gender equity. Contractors should equally pay men and women workers. Construction area should be gender friendly with required facilities. *The envisaged impact is high in magnitude, site-specific in extent, and short-term in duration.*

Mitigation Measures

The Subproject will ensure to:

- Provide equal wage to male and female for similar nature of work.
- Restrict use of child labor i.e., below 16 years of age (which is as per government and ILO guidelines).
- Provide female friendly construction environment with separate cabins and toilet for women in the camp.
- Prepare suitable work categorization for women.

4.2.15 Socially Undesirable Activities

The workers may use alcohol and other forms of intoxication, gamble and quarrel with locals, disrespect local culture and religion, and may promote socially undesirable

activities in and around the project area. *So, the envisaged impact is low in magnitude, local in extent, and short-term in duration.*

Mitigation Measures.

- Restrict movement of workers out of camp after dinner time in the night.
- Prohibit the use of alcohol and gambling in the camp.
- Supply water supply, daily consumable items, communication facility in the camp so as not to create additional pressure on the local services.
- Orient workers to show respect to local tradition and culture.
- Prepare a code of conduct for all project staff, orient them and monitor that these are effectively followed by all.
- Assign a public relation officer to keep close and regular consultation and coordination with local communities.
- Regular monitoring of workers' behavior and take appropriate measure on rule violators.

Operation Phase

4.2.1 Hazards and Safety

Occupational health hazard and safety of staffs is the major issues during the operation phase of the substation. The possible electric shock and fire hazard might cause injury or death to working staffs thus the protection measures should be taken all the time. *The envisaged direct impact is high in magnitude, site specific in extent, long term in duration.*

Mitigation Measures

- There will be the use of insulation, guarding, grounding, electrical protective devices, and safe work practices.
- Boundary walls and / or security fences around substations to prevent unauthorized access.
- Only trained and authorized personnel will be allowed for the electrical works.
- No electric wire shall be stringed above the house.
- Security fences around the substation.
- Establishment of warning signs
- Shutdown shall be taken during work on DL route

4.2.2 Electric and Magnetic Field Effect

Electric power distribution lines create electric and magnetic field together, referred to as electromagnetic fields (EMF). Electrical flux density declines in inverse proportion to the square of the distance and magnetic fields decline in inverse proportion to the cube of the distance; so, there will be no impact outside of the substation boundaries. [7] Research on the long-term effects of EMF associated with distribution lines is inconclusive with respect to health risks. As noted in the World Bank EHS guidelines for transmission and distribution systems, there is no empirical data demonstrating adverse health effects from exposure to typical EMF levels from power transmissions lines and equipment.

[7] E.g., at a distance of 10 meters from a single distribution line or conductor, electrical flux density drops to 1% of the field strength at a distance of 1 meter from the conductor: 1/ (10*10) = 1%. Likewise, the magnetic field drops to 0.1% of the field strength at the conductor: 1/ (10*10*10) = 0.1%.

5. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

5.1 Methodology in Information Disclosure, Consultation and Participation

The following methodologies were followed for information disclosure, consultation and participation:

i. Identification of the stakeholder is important to understand how the Subproject activities will engage with different institution/groups/individuals. The stakeholders are the groups that might be affected by the Subproject or might influence Subproject outcomes. The identified stakeholders are considered in three groups (**Figure 5-1**).

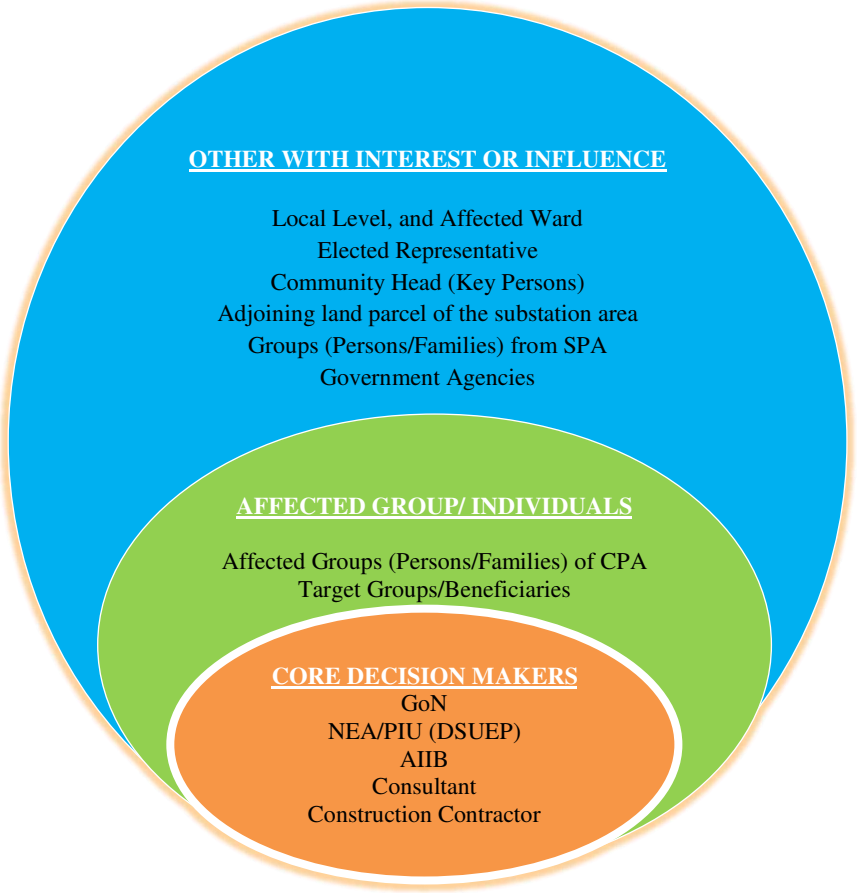


Figure 5-1: Identified Stakeholder in the Subproject[8]

ii. The notice with subject of consultation, venue, and time was pasted at Subproject footprint area, local level and affected Ward office in presence of concerned local stakeholders (**Annex 1**). People were explained about the notices and their views were noted and agreed as Minutes.

iii. Study team members visited all the local government offices within the Subproject influence area. Representatives from each local body were also consulted. All local governments were given request letters for their active support in project implementation. Municipalities were requested to provide written suggestions. The

[8] *Referenced Meaningful stakeholder engagement: a joint publication of the MFI working group on environmental and social standards / Reidar Kvam, PP-19, 2019.*

deed of enquiry (Muchulkas) and Letter of Declaration from the stakeholders are presented in **Annex 6 and Annex 7**.

iv. Local communities nearby substation area and along the distribution line routes were consulted, and were briefed about the Subproject activities and likely benefits with their suggestions (included in the Minutes).

v. During the Subproject construction phase, booklets informing about the Subproject activities, likely impacts and mitigation measures together with the complaints handling mechanisms will be developed and distributed in the Subproject area.

5.2 Consultation and Information Disclosure

Consultation aims to encourage participation of stakeholders and communities of the Subproject area in identification of issues, comments and suggestions. The Subproject affected groups (persons/families) were given more emphasis during the field consultations. Public consultations were conducted at Khadachakra Municipality, Ward No. 1, Karapu on 25th January, 2022, Sanni Tribeni RM, Ward No. 2, Raku on 27th January, 2022, Raskot Municipality, Ward No. 6 & 7 on 28th January, 2022, Sanni Tribeni RM, Ward No. 4, Ujjyal Gau on 29th January, 2022, Sanni Tribeni RM, Ward No. 1, Regil on 30th January, 2022, and Sanni Tribeni RM, Ward No. 1 on 27th January, 2022 (**Figure 5-2**). The concerns expressed and issues/ raised during the consultation were documented as in the form of minutes (**Annex 5**).

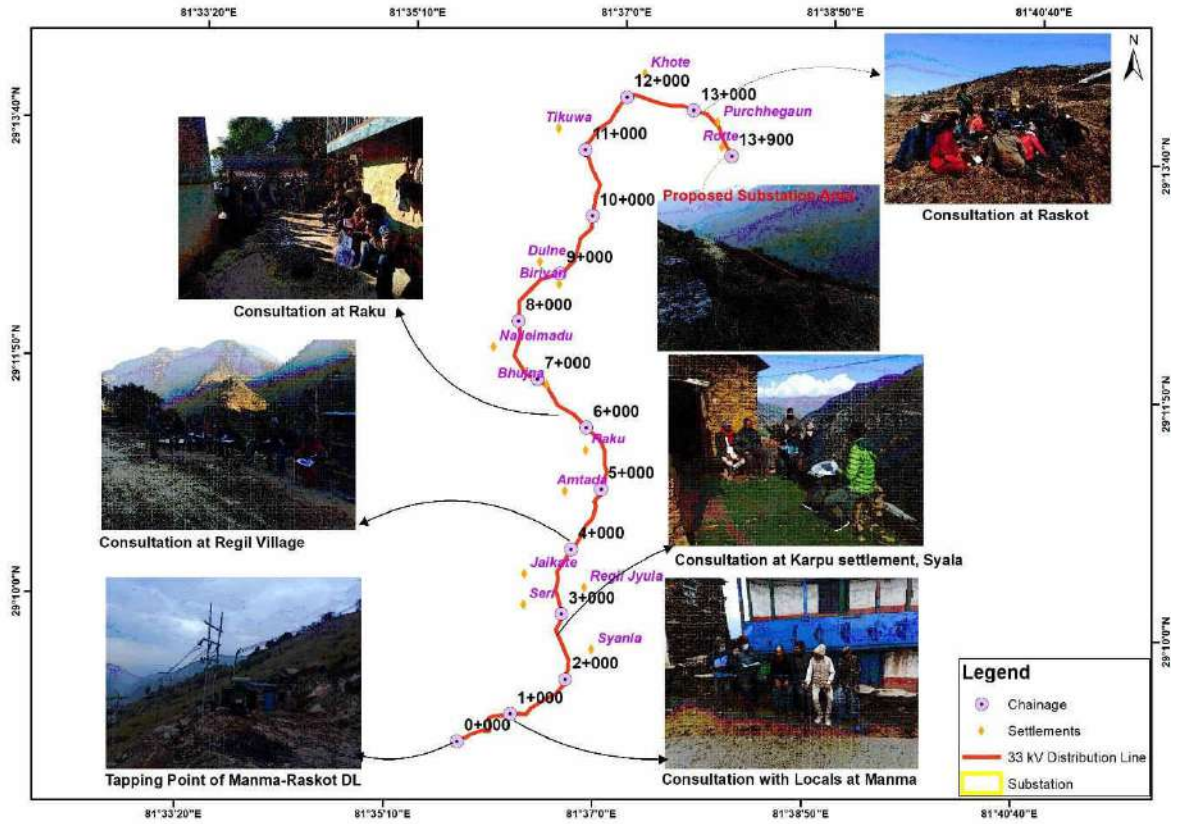


Figure 5-2: Consultation with the stakeholders and communities in the Subproject Area.[9]

[9] *Field Study, 2022. Used SW Map and GIS*

Major benefits expected from the implementation of Subproject through the perspective of local people were identified from public interaction, and that included improvement in the rural electrification facilities ensuring the uninterrupted electricity in the households and better functioning of industries in the locality. The issues, comments and suggestions received in the consultation are presented in **Table 5-1**.

5.3 Comments and Suggestion Received

Table 5-1: Summary of issues, comments and suggestions received in Consultations

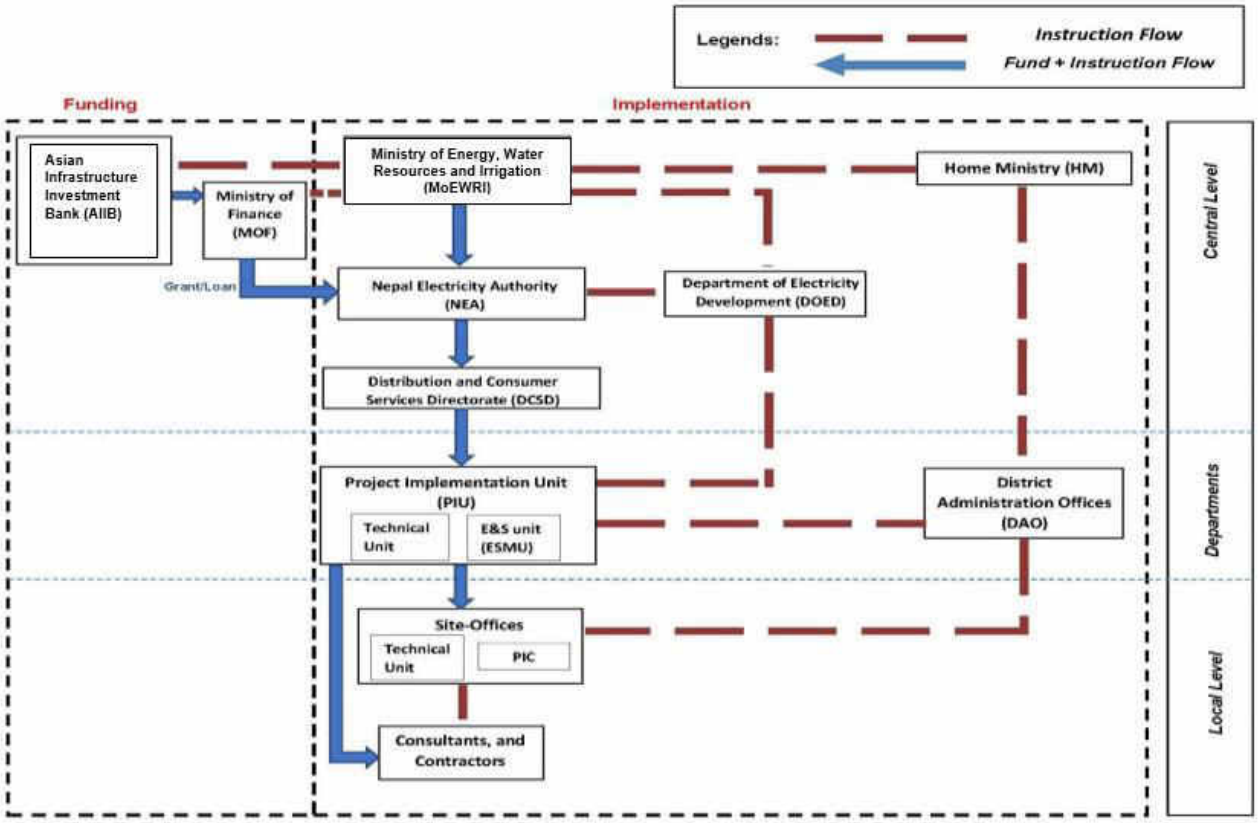
Source: Field Visit, 2022

Date	Location	Issues, comments and suggestions received	Participants
25th January 2022	Khadachakra Municipality-1, Karapu	• While this sub-project start working on the distribution line, the pole should take from outside the settlement area and placed on the edge or side of the land when it is taken from a private property. • When the distribution line is extended, the project will have to provide information to the landlord before the line is started, otherwise the project will have to be compensated for the damage to the crop and the plant. • During the project construction period a priority should be given employment for families directly affected. • There are no proper electricity supplies in the region. So, this sub-project should be conducted as quickly as possible. • There are no impacts on the cultural, occupation, religion and customary right of our aboriginal tribes by the extension of distribution line of this sub-project in our community. • The proposed sub-project will remain full support from the family affected by the distribution line. • The distribution line (Chainage 5+200 to 6+400) of the sub-project should be brought from edge of the Sallery Community Forest which is in the western part of the Raku village • Tree plantation should be carried out according to rules and regulation of Government of Nepal, if in case any tree needs to cut down in any parts of this distribution line. • There are no proper electricity supplies in the region so, this sub-project should be conducted as quickly as possible. • The ward office must coordinate with the affected household and community in case of any issues arise • It is requested to the sub-project for the construction of boundary and playground management in the Shree Janajyoti Ma. Vi., Tikuwa.	14,0F-14M
27th January 2022	Sanni Tribeni RM-2, Raku		12,0F-12M
28th January, 2022	Raskot Municipality-6 & 7		22,2F-20M
29th January, 2022	Sanni Tribeni RM-4, Ujjyal Gau		11,2F-9M
30th January, 2022	Sanni Tribeni RM-1, Regil		16,4F-12M
27th January, 2022	Sanni Tribeni RM-1		12,3F-9M

6. INSTITUTIONAL ARRANGEMENT AND GRIEVANCE REDRESS MECHANISM

6.1 Institutional Arrangement

The Ministry of Energy, Water Resources and Irrigation (MEWRI) is responsible for overall planning and execution of the plans for the overall development of water and energy sector in Nepal. Nepal Electricity Authority (NEA) under MEWRI is the responsible agency for the implementation of the DSUEP. The project comes under Distribution and Consumer Services Directorate (DCSD) of NEA. Project Implementation Unit (PIU) under DSUEP is the implementing unit of the project. Environment and Social Management Unit will be within PIU. All the resources needed for the EMP implementation for the construction and operation phase will be provided by the PIU. The site offices under PIU will have the supervision consultant with environmental and social safeguard specialist, who will be responsible for compliance monitoring activities during the construction phase. He will also provide technical support in preparing the monitoring report.



Source: ESMF-DSUEP

Figure 6-1: Institutional Arrangement for Environmental and Social Management

Contractor shall have the main responsibility to ensure the compliance. The Contractor shall prepare an Environment, Health and Safety (EHS) report that would be approved by DSUEP/PIU before field mobilization. They need to strictly follow the EHS plan requirements. Contractor shall urgently comply with corrective actions for any noncompliance as instructed by PIU. The ESMU of PIU shall provide safeguard compliance orientation to all environment monitors and safeguard team of the contractor, one month before the construction works start.

6.2 Grievance Redress Mechanism

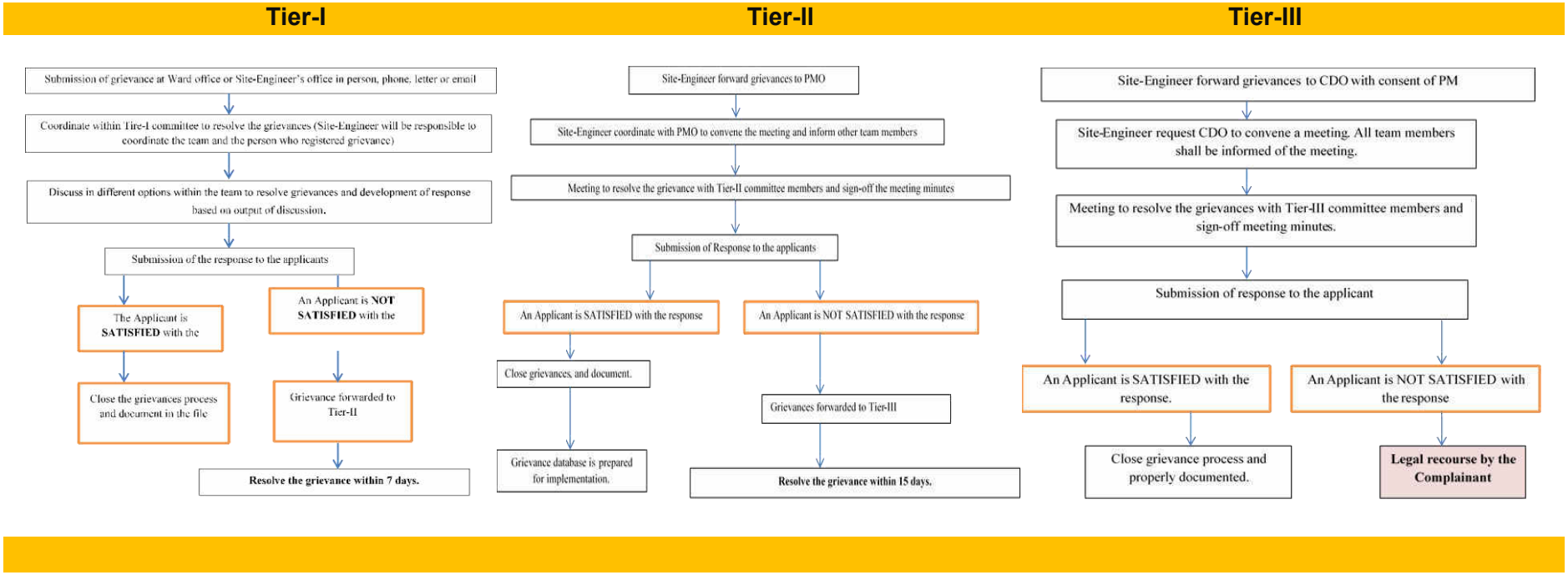
The Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental related issues at the subproject level. The GRM is designed to be simple, transparent and responsive. GRM shall address only the concerns arising due to the project implementation activities, mainly during construction stage. Social Comment Addressed -In each subproject, three levels Grievance Redress Mechanism will be established. During the ESMP study period NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the subproject level. Till date NEA has established Tier-I and Tier-II GRM has been established at local wards level and Municipality/RM level. Tier-II will be established before construction work start.

GRM process entails the concerned party submitting a grievance either in-person, or via phone, letter, or email to the Site-Engineer or the concerned Municipality Chief or the concerned Ward Chair. The Site-Engineer will record such complaint. In cases where Ward Chair has received such grievance, he/she should forward the grievance to the field office Engineer. The Site-Engineer shall notify the committee members of Tier-I and arrange meeting to resolve the received grievances. If not resolved such grievances will be carried to Tier II and Tier III. The three levels of GRM will be based on time-bound schedules as mentioned in **Table 6-1**. The subproject will carry the regular meeting for Tier-I, once a month to follow up if any grievances are received or not and to resolve the grievances received and update its status to PIU. **Figure 6-2** describes the Workflow Diagram of GRM for the Subprojects.

Table 6-1: Levels of Grievance Redress Mechanism Based on Time Bound

Provisions	**Levels of Grievance Redress Mechanism**					
	First Level (Tier-I)		**Second Level (Tier-II)**		**Third Level (Tier-III)**	
Level	Local Level		Project Manager Office (PMO) headed by the Project Manager (PM) at Project Implementation Unit (PIU)		District Level	
Supervisory	NEA Site-Engineer		PMO		Chief District Officer (CDO)	
Assistance	Chief/Mayor of Concerned Local Level and Chairperson/ Representative of Ward, Construction Contractor's (CC) Representative and Project Supervision Consultant's (PSC) Safeguards Officer		NEA Site-Engineer and PSC's Social Expert, and Construction Contractor		PMO, affected persons, representative from Rural Municipality/Municipality, Site-Engineer, PSC's Social Expert. *If deemed necessary, representative from Forest Office, representative from Land Revenue Office, and representative from Land Survey Office are invited.*	
Days for Resolving Complain	7 days of receipt of a complaints/ grievance		15 days of complaints forwarded by Site-Engineer		15 days	
Committee Members	**Committee Member**	**Designation**	**Committee Member**	**Designation**	**Committee Member**	**Designation**
	Municipality Chief	Coordinator	Project Manager	Coordinator	Chief District Officer (CDO)	Chair
	Site-Engineer-NEA	Member secretary	Site-Engineer	Member Secretary	Project Manager	Coordinator
	Safeguards Expert from Consultant	Member	Municipality Chief	Member	Site-Engineer	Member Secretary
	Contractor Engineer	Member	Safeguards Expert from Consultant	Member	Municipality Chief/Ward Chair	Member
	Ward Chair	Member	Contractor Engineer	Member	Safeguards expert from consultant	Member
					Contractor Engineer	Member
					Representative from affected people	Member

Figure 6-2: Workflow Diagram for GRM from NEA[10]



***** Affected People (AP) have the right to refer the grievances to appropriate courts of law if not satisfied with the redress at any stage of the process i.e., the AP will have the choice to approach country's judicial system.

10 *Grievance Redress Mechanism (GRM) Prepared for the sub-projects financed by Asian Infrastructure Investment Bank (AIIB) under Distribution System Upgrade and Expansion Project (DSUEP), Nepal Electricity Authority (NEA), May 2021.*

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Environmental and Social Management Plan and Mitigation Measures

The overall Environmental and Social Management Plan of the Subproject is presented in **Table 7-1**. The ESMP will be implemented in three stages: (i) pre-construction (ii) construction, and (iii) operations and maintenance. This ESMP is living document and will be updated and modified under the supervision of ESMU of PIU.

Table 7-1: Environmental and Social Management Plan (ESMP)

Project Activity	Environmental and Social Issues	aManagement/Mitigation Measures	Mitigation Cost	Responsibility	
				Planning and Implementation	Supervision and Monitoring
Pre-construction Phase					
Approvals, permits and clearances	• Installation of poles along the edge of private farm lands	• Site office and the contractor must inform the community prior to the installation of poles and stringing of the line along DL route		Site Office/ Contractor/	DSUEP (PIU)/NEA
Construction Phase					
Construction work in substation area and distribution line alignment	• Inadequate/unsafe working conditions	• Appropriate contract clauses to ensure satisfactory implementation of contractual environmental, health, and safety measures.		Site Office/Contractor	PIU/NEA
	• Accident may arise if the pit hole (depth-2m and diameter-0.22 m) prepared for steel tubular poles remains open for long time	• Pit holes for the steel tubular pole shall not be left open and should be filled instantly by erecting poles and concrete-cement around the base, should be used to strengthen the pole erection • Contractors should follow the guideline provided by the PIU	Project Cost	Contractor/ Site Office	PIU/ESMU/ PIU
	• Dust emission - transportation of materials and	• Water sprays to be used for dust control as necessary in the earthen roads of the settlements nearby the substation area and	Air Quality Monitoring-1,50,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU

	movement of construction crew and equipment will cause minor impact	proper storage of the construction materials (sand, cements, aggregates and spoil) to be stored in substation area. • Steel poles firstly stocked in the substation area and secondly in the open barren area in coordination with Municipalities and Rural Municipalities. No social and environmental issues for the stockpiling of the steel poles and stringing wires	Sprinkling water (Dust Management) 2,00,000.00 (NRs.)		
	• Noise emission-Construction related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites	• Boundary walls serves as a noise barrier, and these shall be constructed as early as possible. • Construction equipment to meet national emissions and noise control standards.	Noise Level Monitoring-50,000.00 (NRs.) Provision of PPE in Project Cost	Contractor/ Site Office	PIU/ESMU
	• Interference with drainage patterns will be temporary at substation during construction phase	• A proper drainage system should be managed within the substation area. • Storm water run-off need to be minimized and controlled with bunding temporary dikes • Drainage management as a preventive measure against breeding of mosquitoes and other pests	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Possible erosion and flooding in Karnali River	• Concrete foundation is recommended for Steel tubular pole installation for 33 kV lines. • Pit hole prepared for the installation of steel tubular pole shall not be left open as	Project Cost	Contractor/ Site Office	PIU/ESMU

		possibility of accident may arise.			
		• Protection works along the eroded sections in the Karnali River 20-30 m distance from the distribution line. • Client needs to coordinate with local level governments to give priority for the embankment activities for the protection of cultivated land and proposed 33 kV distribution lines.	Cost from Local Government	Khandachakra Municipality, Sanni Tribeni RM and Raskot Municipality	Khandachakra Municipality, Sanni Tribeni RM and Raskot Municipality /PIU
	• Construction associated wastes generated within substation area and campsite location	• Organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered, by a thick layer of soil • Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix should be used as refills for ground leveling. • Recyclable wastes like left out/non-usable reinforcement bars, and packing materials to be sent or sold to scrap vendors. • Effective coordination with local level government for the proper waste management	Solid wastes management – 1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
	• Illegal fishing and bird hunting by the labors	• Discouraged by supplying adequate food items (poultry and fish) requirement within the camp. • Awareness on legal provisions upon illegal hunting of biodiversity need to be disseminated	Project Cost	Contractor/ Site Office	PIU/ESMU

	• About 4.234 ha of forest area occurs within RoW of the proposed distribution line and substation area • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 698	• Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019). • Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.	The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report	Contractor/ Site Office	PIU/ESMU
	• Use of firewood from nearby forests	• Workers and staffs should be restricted to use firewood for cooking. • Providing LPG based stoves in Labor camp.	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Loss of standing crops at pole installation locations (depth-2m and diameter-0.22 m)	• Pole to be installed at the edge of cultivated land making no loss of standing crops • Need to make prior consultation with landowner during installation of the pole and stringing of distribution lines • If there is loss of crops, appropriate compensation will be made by the project	Project Cost	Contractor/Site Office	PIU/ESMU
Environment, Health and Safety	• Injury and sicknesses workers and members of the public • Potential fecal coliform contamination in	• Contractor shall prepare the Environmental, Health and Safety plan and take approval from the client. Provision of safety officer in the work team shall be made during construction period. • All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties.	Establishment of Labor	Contractor/Site Office	PIU/ESMU

	drinking water	• Basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid shall be made available for the campsite. • Provision of health insurance to employees. • Security fences around the substation. • Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs). • Awareness on HIV/AIDS and other sexually transmitted disease. • Awareness on providing basic sanitation facilities and waste management control to the labors. • For coronavirus (COVID-19) pandemic situation, Contractors should arrange for quarantine and health services for infected workers.	Camp with basic facilities – In Project Cost EHS Awareness Trainings - 1,50,000.00 (NRs.) COVID-19 measures 2,00,000.00 (NRs.)		
Management of electric equipment's, toxic materials of chemical wastes	• Possible spills resulting in contamination of soil, water, and air	• Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container, and sealed carefully	1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
Operation and Maintenance Phase					
Electric shock and fire hazard	• Injury or death to the workers and public	• Use of insulation, guarding, grounding, electrical protective devices, and safe work practices. • Boundary walls and / or security fences around substations to prevent unauthorized	Project Cost	NEA	NEA

		access. • Only trained and authorized personnel shall be allowed for the electrical works. • No electric wire to be stringed above the house. Installation of warning signs.			
Routine operations and maintenance	• Potential disturbance to other utility functions and vehicular traffic.	• Maintain warning / advisory signs in good and visible condition • Visual and technical inspection	Project Cost	NEA	NEA
Oil spillage	• Contamination of land/nearby water bodies	• Substation transformers should be stored within secure and impervious bundled areas with a storage capacity of at least 110% of the capacity of oil in transformers and associated reserve tanks.	Project Cost	NEA	NEA
Bird electrocution and collision	Electrocution can cause a risk to bird species which perch on power line infrastructures	Provision of bird guards above the poles and white spirals on the conductors to improve visibility	Project Cost	NEA	NEA

(*The provision of environment and social management cost should be included in the project cost making each item visible in BOQ of bidding document for the safeguard compliance by the construction contractor*)

7.2 Proposed Monitoring Plan

The monitoring proposed in **Table 7-2** will be of value primarily for establishing baseline conditions in the Subproject area, and then for ambient quality monitoring.

Table 7-2: Minimum Provisions for Environmental Monitoring

Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
Construction Stage				
Clearing of construction site	Substation boundaries	• Field inspection of Subproject Sites and ensure that appropriate safety measures are implemented	Clearing and restoration: weekly	Contractors to implement corporate EHS plan, drainage management and solid waste control in substation area.
Use of forest area and loss of trees	33 kV DL alignment	• Field inspection of Subproject sites and ensure the compensatory plantation of 1:10 • Related approval document for tree clearance	Prior to the construction work	Contractor responsibility under the supervision of PIU/DFO
Air: SPM, Noise: dB	Substation boundaries and nearest receptor to substation	• Spot check for noise and dust using portable monitoring device	Air, and noise: quarterly during construction period	Contractors need to conduct the air and noise monitoring during the construction period at the substation location

Construction wastes: on-site inspection	Visual inspection of active construction areas, including equipment staging areas and camps	• Spot check / visual inspection of solid waste (spoil, muck etc.) generation and disposal. • Analysis of transformer oils to determine if polychlorinated biphenyls are present.	Monthly spot checks for construction waste management	PIU safeguard officers to provide oversight via regular field inspections, and submit monitoring reports to the Bank
Occupational health and safety	Substation boundaries	• No. of Toolbox talk and safety orientation to the workers • No. of workplace accidents • Use of PPE by workers	Daily Inspection during construction Monthly Inspection during operation phase	Inspection of the construction site by safety officer and PIU safeguard officer
Child involvement in construction work (need to be prohibited)	Substation work	• Spot inspection at construction sites	Monthly Inspection during construction	Site Office

7.3 Environmental and Social Management Plan Cost Estimates

Preliminary cost estimates for the ESMP implementation are shown in **Table 7-3**. These estimates cover the basic monitoring activities and the mitigation measures to be complied from the contractor's side. The ESMP cost estimated for the **Manma-Raskot Distribution Line** is NRs 13,00,000.00. The community support activities and the costs will be presented in the Community Development Plan (CDP). NEA has agreed for the effective implementation of the mitigation and monitoring cost items as mentioned in table below.

Table 7-3: Environmental and Social Management Plan Cost Estimates

SN	Budget Items	Unit	Rate (NRs.)	Estimated Amount for Monitoring (NRs)-Lump Sum
1	Air Quality Monitoring (at substation)	6 (Times)	25,000.00	150,000.00
2	Noise Level Monitoring (at substation)	6 (Times)	8,334.00	50,000.00
3	Sprinkling of water to be used for dust control necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil)	200 (Times) During Excavation and Civil works	1000.00	2,00,000.00
4	Management of electric equipment's, toxic materials of chemical wastes	-	L.S.	1,00,000.00
5	Segregation and management of solid wastes	-	L.S.	1,00,000.00
6	COVID-19 measures (considering pandemic situation) standardize the quarantine facilities with health aid to the labors	-	L.S.	200,000.00
7	EHS Awareness raising trainings to the labors	10 (Events)	15,000.00	1,50,000.00
8	Meeting of Safeguard Desk and Grievance Redress Committee at Field Level	24 (Months)	14,583.00	3,50,000.00
Total				**13,00,000.00**

8. CONCLUSION

Potential environmental impacts of this Subproject are not diverse and are all site-specific i.e., confined to the Core Project Area. Civil works will have minimal temporary impacts on air, noise and water quality. Erection of poles during construction shall follow right of way of existing roads and the edge of farmlands. The PIU should give prior information before installation of the poles. In the ESMP consultations conducted in the settlement area, people have agreed for the implementation of the Subproject and have suggested to install poles on the edge of farm-lands, without affecting any private structures along the distribution line. If there is loss of crops, appropriate compensation shall be provided. The implementation of the proposed Subproject needs 4.234 ha of forest area with estimated loss of 698 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. Mitigation measures are suggested in this ESMP to avoid any possible environmental and social impacts. The total ESMP cost for this Subproject is NRs. 13,00,000.00. NEA Project Implementation Unit has agreed to implement the estimated cost for the mitigation measures and monitoring activities.

REFERENCES

CBS. (2019). Environmental Statistics of Nepal. Kathmandu: Central Bureau of Statistics.

CBS. (2018). Rural Municipality-Municipality Profile of Kalikot District. Kalikot: Office of Statistics.

DHM. (2021). Retrieved from http://mfd.gov.np/city?id=26

DoS. (2020). Data & Metadata. Retrieved from National Spatial Data Center: Geoportal: http://nationalgeoportal.gov.np

Environmental and Social Framework (ESF) Asian infrastructure investment Bank, Feb 2016 (Amended February 2019).

Environmental and Social Management Framework (DSUEP) NEA- November 2021

GoN (2019): Environmental Protection Act (EPA), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN (2020): Environmental Protection Rules (EPR), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN. (2050). National Environmental Impact Assessment Guidelines. National Planning Commission Secretariat.

GoN. (2019). Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, Ministry of Forests and Environment, Singhadurbar, Kathmandu.

Shahi, D. K., Rijal, H. B., & Shukuya, M. (2019). Study on Household Energy Usage Patterns in Urban and Rural Areas. Journal of the Institute of Engineering, 15 (No. 3), 402-410. doi:https://doi.org/10.3126/jie.v15i3.32761

Stakeholder Engagement Strategy, DSUEP, NEA 2019.

The White Paper. (2018). Energy, Water Resources and Irrigation Sector's Status and Roadmap for the Future. Kathmandu: Government of Nepal.

WBG. (2018). https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2018&locations=NP&start=1996&view=chart. Retrieved from https://www.worldbank.org.

WECS. (2014). Energy Data Sheet. Water and Energy Commission Secretariat. www.energyefficiency.gov.np/downloadthis/final_data_book__11_june_2014.pdf

ANNEXES

Annex 1: SAMPLE NOTICE FOR PUBLIC CONSULTATION AND GRM FORMATION LETTER TO STAKEHOLDERS

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक अध्ययन प्रतिवेदन तयारी सम्बन्धि सूचना

सूचना प्रकाशन मिति: .....

..... प्रदेश ..... जिल्ला .....(नगरपालिका/गाउँपालिका/महानगरपालिका/उपमहानगरपालिका) मा एसियन इन्फ्रास्ट्रकचर इन्भेस्टमेन्ट बैंकको ऋण सहयोग भएको नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना कार्यान्वायन हुनुभन्दा अघि सो आयोजनाले त्यस क्षेत्रको वातावरण तथा सामाजिक पक्षहरुमा के-कस्तो प्रभाव पार्दछ भनि स्थानीय सरोकारवालाहरु सँग छलफल गर्न आयोजना क्षेत्रका सम्पूर्ण सबै सरोकारवालाहरुको निम्न स्थान तथा समय उपस्थितिका लागि यो सूचना प्रकाशित गरिएको छ।

सार्वजनिक छलफल हुने स्थान, मिति र समय:

स्थान:

मिति:

समय:

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

(ए.आई.आई.बि.)

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

प.सं. ०७८/७९: ९३८. मिति: २०७८/१०/०७

श्री .....
.....

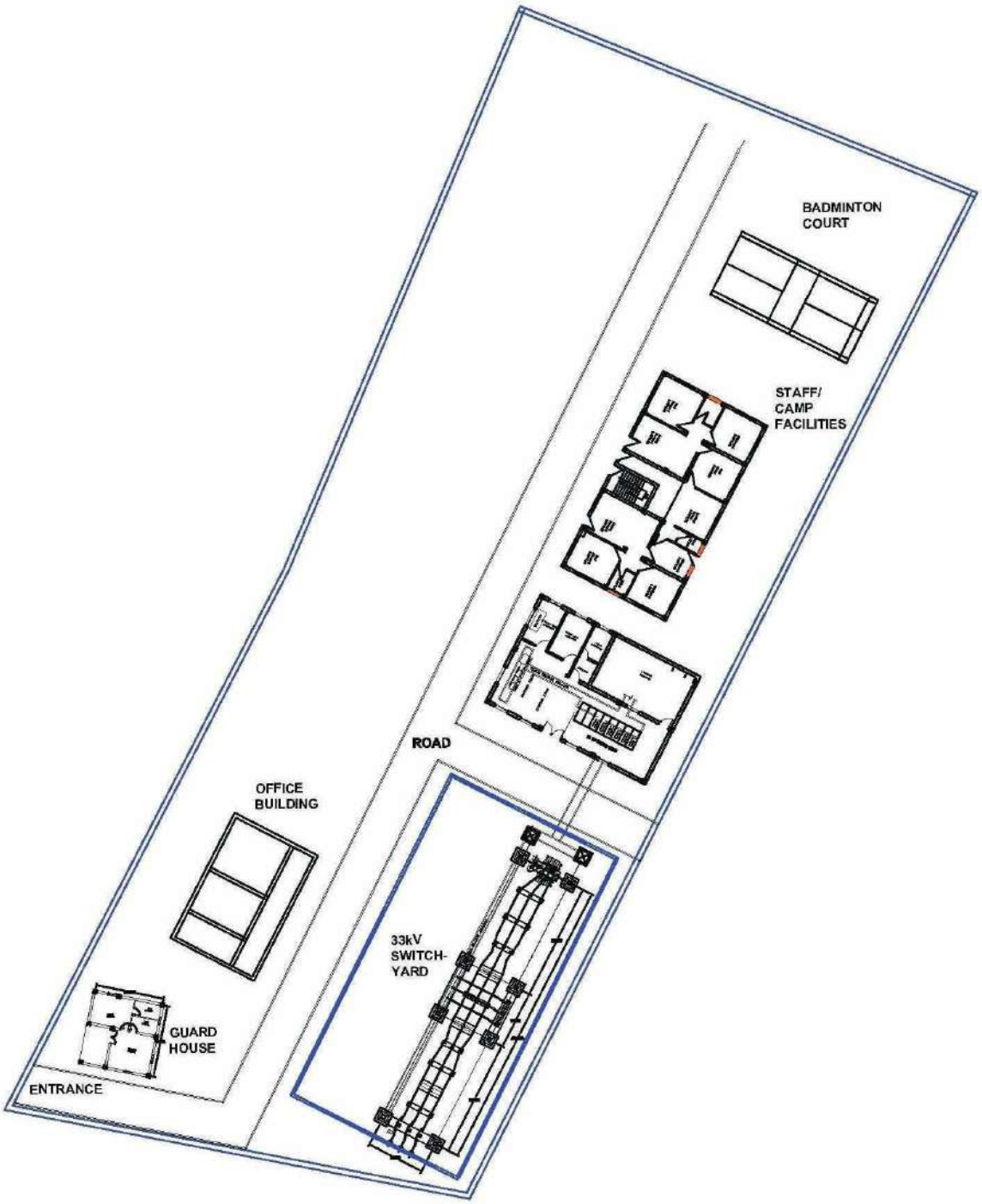
विषय: गुनासो समाधान संयन्त्र गठन भएको सम्बन्धमा ।

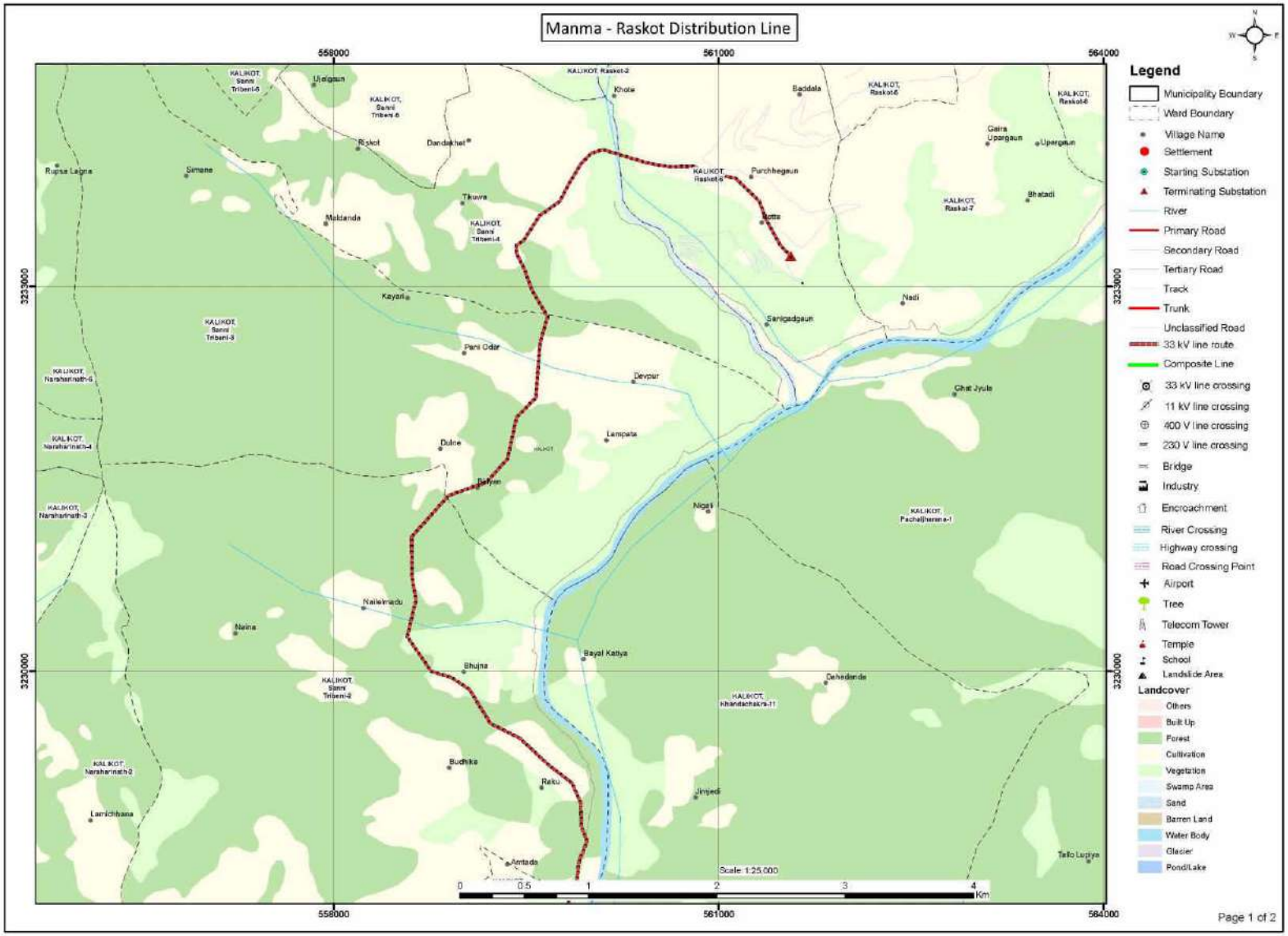
उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्वेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ए.आई.आई.बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम तहाँ ***वडा/गाउँपालिका/नगरपालिका/उप-महानगरपालिकामा*** ३३/११ के.भी. सब-स्टेशन, ३३ के.भी. लाईन, ११ के.भी. लाईन, ४०० भी. लाईन, आदि निर्माण कार्यहरु हुने भएकोले सो कार्यहरु गर्दा स्थानीय सरोकारवालाहरुको कुनै गुनासो भए सो गुनासोको समाधान गर्न गुनासो समाधान संयन्त्र निर्माण गरिएको छ। अतः संलग्न गुनासो समाधान संयन्त्र दस्तावेज बमोजिम आफ्ना गुनासोहरु दर्ता गर्न र सोही दस्तावेजमा भनिए बमोजिम गुनासोको समाधान हुने व्यहोरा सम्पूर्ण सरोकारवालाहरुलाई जानकारी गराइन्छ।

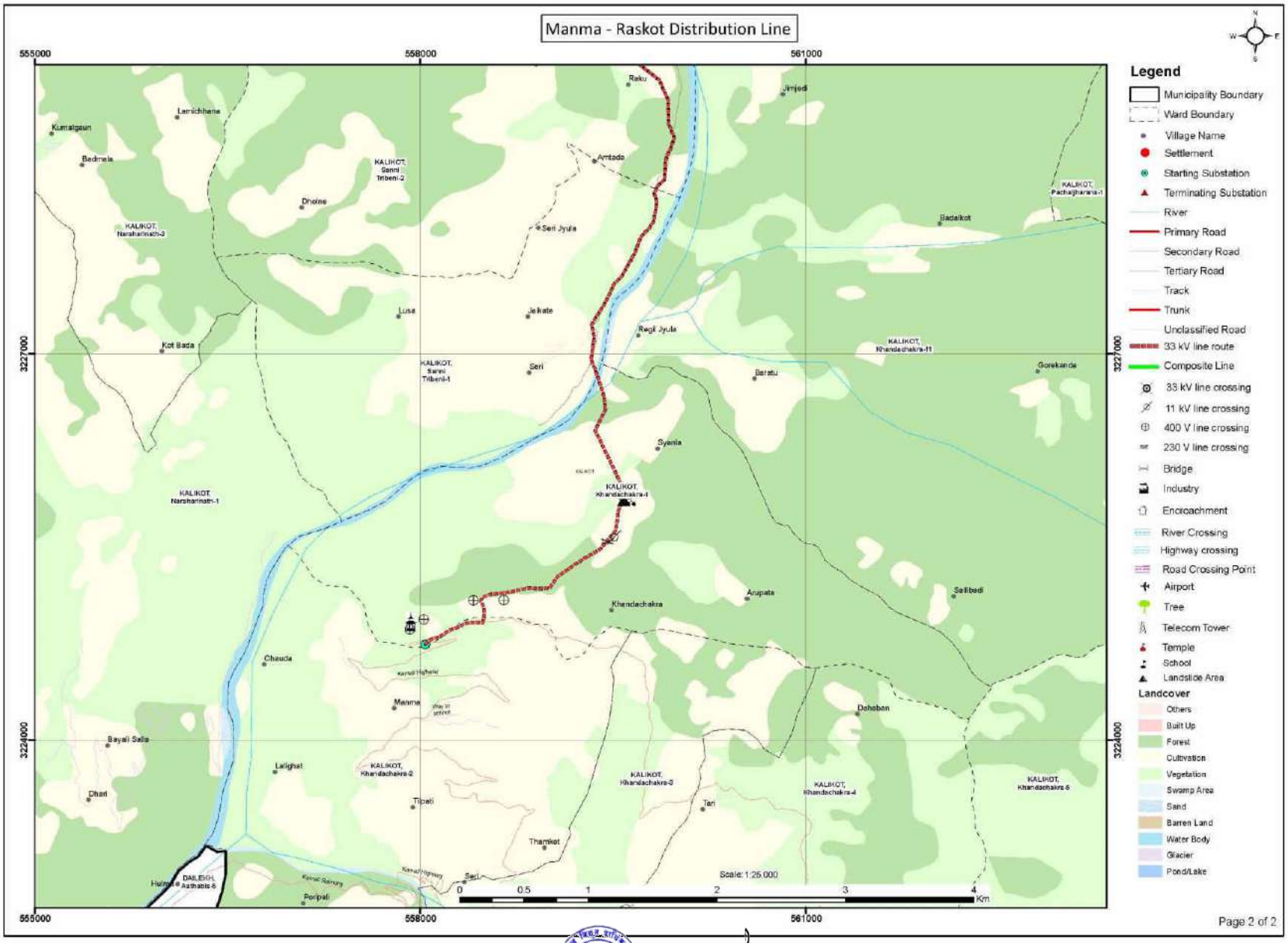
भवदीय,

(केशव श्रेष्ठ)
आयोजना प्रमुख

Annex 2: LAYOUT MAPS OF SUBSTATION AND DISTRIBUTION LINE ALIGNMENT




Manma - Raskot Distribution Line
558000
561000
564000
3233000
3230000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Starting Substation
Terminating Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
33 kV line route
Composite Line
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Tree
Telecom Tower
Temple
School
Landslide Area
Landcover
Others
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Scale 1:25,000
0 0.5 1 2 3 4 Km
Page 1 of 2


Manma - Raskot Distribution Line
555000
558000
561000
3227000
3224000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Starting Substation
Terminating Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
33 kV line route
Composite Line
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Tree
Telecom Tower
Temple
School
Landslide Area
Landcover
Others
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Reku
Jimjed
Lamichhane
Kumalgaun
Badimala
Amtada
Dholne
Seri Jyula
Badalkot
Lusa
Jelkate
Regil Jyula
Kot Bada
Seri
Baratu
Gorekanda
Syanla
Khandachakra
Arupata
Salibadi
Chauda
Manma
Daboban
Sayali Salla
Lalighat
Dhari
Tripati
Tari
Thamkot
Poripati
Scale: 1:25,000
0 0.5 1 2 3 4 Km
Page 2 of 2

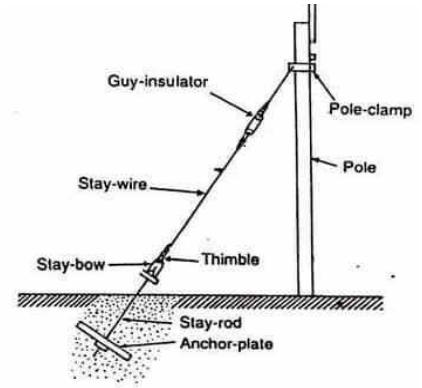
An



Transformer



Switch Yard



Stay/Guy Sets



Steel Tubular Pole



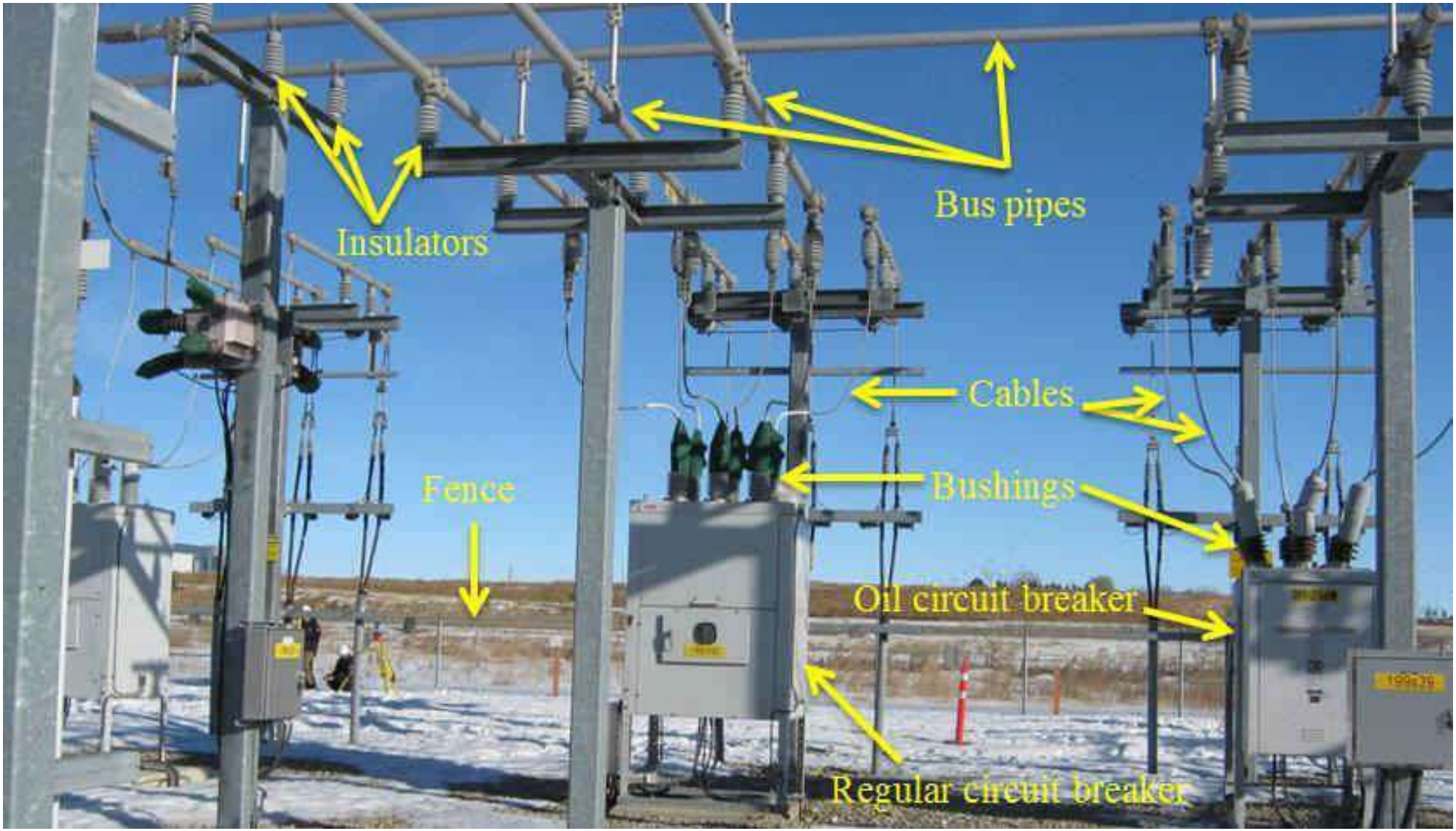
Insulator



Civil-Structures Supporting Electrical Components



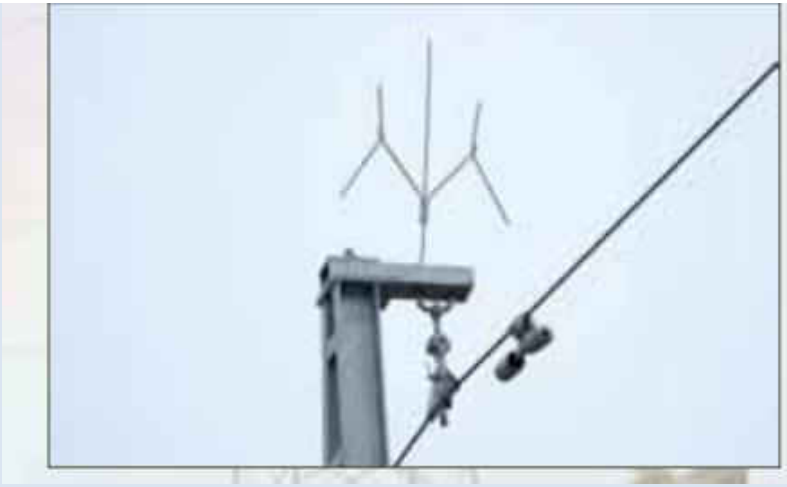
Conductor



Possible components within 33 kV/11 kV Substation



Bird Diverting Reflector



Wishbone Prevents Bird Landing on Wire



White Spiral in Wire Improves Visibility of Wire



Construction of Nest at Poles also divert Brid not sitting at Wires

Annex 4: LEGISLATIVE PROVISIONS

SN	Legal Provisions	Description	Relevancy concerning Project
1.	**Constitution of Nepal**	● The Constitution of Nepal is the main legal document, which emphasizes the right to a clean environment of the people, natural resources protection, preservation, and its prudent use. Rights regarding the clean environment, under article 30: ● It includes making multi-purpose development of water resources, while according priority to domestic investment based on public participation to ensure a reliable supply of energy affordably, and easily, and make proper use of energy for the fulfillment of the basic needs of citizens, by generating, and developing renewable energy in article 51 (g).	DSUEP helps to fulfill the rights of people to live in a clean environment along with fulfilling the basic needs by providing access to sufficient energy.
2.	**Environment Protection Act 2076 (2019 AD)**	● Section 3 of the Act requires the proponent to conduct environmental studies concerning the prescribed proposals of any developmental works. Subsection 2 of this act provides the framework for the environmental study report prepared according to sub-section (1) shall, in fulfillment of the process as prescribed, be submitted to the relevant bodies of the Government of Nepal for approval.	Environmental Studies, and approval of the report from the authorized body before construction of any project is mandatory to minimize the negative impacts in Nepal which is addressed in EPA, 2076.
3.	**Environmental Protection Rule, 2077 (2020 AD) [First Amendment on 2078 (2021)]**	● Under the Environmental Protection Rules (2077) first amendment (2078), rule (3) as mentioned in annex (1), Section (F) (Energy, Water Resources, and Irrigation Sector) sub-section (1), a proponent shall be required to carry out the Brief Environmental Studies for construction of transmission line project less than 66 kV in forest land for another purpose.	This rule provides the overall guidance to what type of environmental studies is required according to the project by the Government of Nepal.
		● Pertaining to Rule 3(1), Environment Protection Act (EPA), 2019 describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1)	The proposed Subproject will use the of Kot Durbar Community Forest

		under Environment Protection Regulation 2020 (First Amendment in 2021/05/24 on Nepal Gazette) state "use of forest area for the electricity distribution line project up to 66 KV"	(CF), Nainatal CF, Bhumiraj Mela CF, Chotibagar CF, Salleri CF, Amardev CF, Chulenidanda CF, Nainalmandu CF, Naba Jyoti CF, Koirel Patal CF, Ramalmasta CF, Aulaghari CF and National Forestland for the purpose of 33 kV distribution line extension and substation construction. For which, BES is mandatory.
4.	**Nepal Environmental Policy, and Action Plan, 2050(1993)**	The aims of NEPAP are: ● To manage natural, and physical resources efficiently, and sustainably ● To balance the development efforts, and environmental conservation for sustainable fulfillment of basic needs ● To preserve endemic, and endangered species, and their habitats; the promotion of private, and public institutions for biological resources inventory, and conservation ● To safeguard national heritage ● To mitigate the adverse environmental impact of development projects, and human actions ● To integrate environment, and development through appropriate institutions, adequate legislation, and economic incentives, and sufficient public resources	DSUEP should follow the aims of NEPAP to protect, and conserve the physical, biological, and social environment during the construction of a 33 kV distribution line along with a substation.
5.	**Forest Act 2076 (2019)**	• Pertaining to the chapter 12, Section 42(1), if there is no other alternative to the using of forest area for the operation of a national priority project, plan of which investment is approved by the Investment Board, project of national pride and it appears from the environment examination referred to in the prevailing law that the operation of such plan does not result in significant adverse effects on the environment, the Government of Nepal may give approval, as prescribed, to use any part of the	• About 4.234 ha of forest area occurs within RoW of the proposed 33 kV distribution line and the substation area • Estimated number of trees

		national forest for the purpose of operating such plan, • Similarly, in providing the forest area for the operation of a plan pursuant to sub-section (1), to the extent possible, a land that is adjoining to the national forest area near the project site and situated in the same geographical and ecological belt and has such landscape where forest can be developed shall be provided for the purpose of planting trees at least in the area equal to the forest area that has to be used.	that need to be cleared from the Core Project Area of the proposed DL alignment are 698
6.	**Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019)**	• Pertaining to Section 4 (1), environmental study report should be prepared if the project needs the use of national forest area, • Section 7 require the approval of Government of Nepal, for the use of forest on the implementation of project • Section 17 (3) require plantation of trees in the ratio of 1:10 in the area given by the concerned forest office as a compensation for the removal trees during the project implementation Section 17 (4) require care, maintenance and upkeep of the planted trees and handover to concerned forest office after 5 years.	• About 4.234 ha of forest area occurs within RoW of the proposed 33 kV distribution line and the substation area • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 698
7.	**Electricity Act 1992**	● No person shall be entitled to conduct survey, generation, transmission, or distribution of electricity without obtaining a license under this act. ● The Electricity Act of 1992 has the provision of land procurement for the development of Subprojects that involve electricity generation, transmission, or distribution. The Act states that the licensee may apply to GoN to purchase the land or house of any person if it is required for the generation, transmission, or distribution of electricity. Upon the receipt of such an application, GoN may make the land or house, so requisitioned, available to any corporate body under the prevailing laws.	The main goal of this project is to distribute a sufficient amount of electricity by constructing a 33 kV line, and substation by surveying to minimize the impacts.
8.	**Rural Energy Policy, 2006**	The rationale of formulating, and implementing this policy is to create a conducive environment that	This project helps to improve the

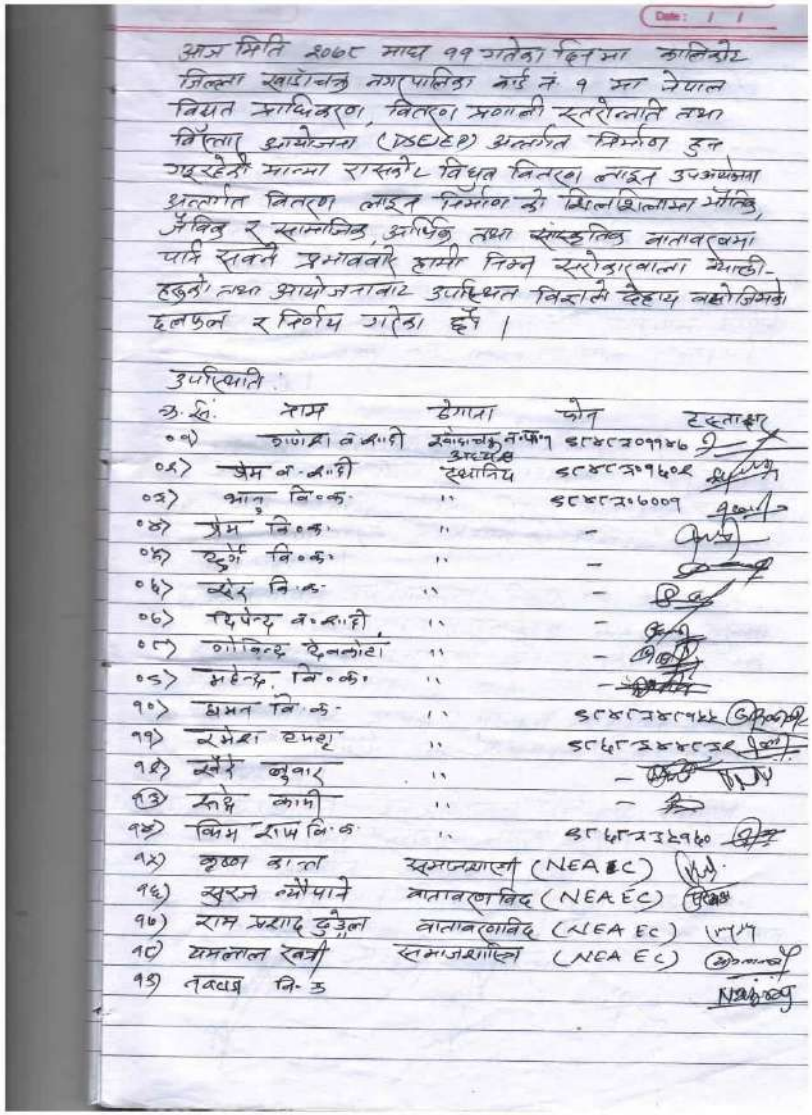
		will self-motivate, and mobilize local institutions, rural energy user groups, non-government organizations, cooperatives, and private sector organizations for the development, and expansion of rural energy resources. The government will facilitate, and promote to involve private development, and expansion of new technologies. It has also envisioned subsidy provision for the promotion of such renewable energy technologies.	distribution, and motivate use the of electricity in rural areas of western Nepal.
9.	**Labor Act, 2074 (2017 AD)**	This labor Act was made under the management of parliament under sub-clause 1 of clause 296 of the Constitution of Nepal. Sub-section 3 of Section 2 states that the employees should not be compelled to other work other than they are assigned for. In addition, Sub-section 5 of Section 2 states about the prohibition of child labor in any organization, and sub-section 6 of Section 2 states that there should not be any kind of discrimination among the employee's regard of religion, ethnicity, gender, origin, language, or intelligence or other kinds of characters.	The construction of a project is only possible when the rights of labor are secure. In this project, the Contractor should follow this act strictly.
10.	**Child Labor (Prohibition, and Regulation) Act, 2056 (2000 AD)**	As per section 3 of this act, no child has not attained the age of 14 years shall be engaged in works as a laborer.	Child labor is strictly prohibited in this project, and Contractors should follow this act.
11.	**Solid Waste Management Act, 2068 (2011 AD)**	This act has been formulated to minimize solid waste products from the target area by setting rules, and regulations on solid waste management (SWM) in the country to develop a better environment for the systematic, and effective management of solid waste, and to involve all the concerned stakeholders in SWM practice. The main features of this act are the discussion of the 3R principle (Reduce, Reuse, and Recycle). 3R principle seems to be very beneficial as it not only increases the life of landfill site but also saves the money which could be used for other infrastructure development. Section 4 of the act assigns the local body to manage or use the solid waste discharged or dumped in the collection center, transfer station, or treatment plant or collected during cleaning.	These acts provide the overall framework to manage the solid waste generated from households to the project level. Also, the proponent should manage the waste generated during construction.
12.	**Solid Waste**	The solid waste management rule was formulated	These rules

	Management Rules, 2070 (2013 AD)	as per the provision made in article 50 of the Solid Waste Management Act, 2068. This regulation has emphasized the segregation of waste at source, and mentioned that the responsibility of proper disposal, and management of source belongs to the producers themselves. Section 3 of the rule describes the segregation, and management of solid waste. It has been mentioned that it is essential to segregate degradable, and non-degradable solid waste at the source.	provide the overall framework for how to reduce the volume of waste disposed of at the source during the construction of the substation.
13.	**Fifteenth Plan**	The vision of the 15th plan is to contribute to the prosperity of the nation through sustainable, and reliable development of hydropower by setting the goal which is to ensure energy security through intensifying hydropower generation. In addition, one of the strategies of the government of Nepal in the 15th plan is to make the distribution system effective, and reliable to increase energy efficiency, and increase power consumption by expanding access to electricity by formulating the required policies:	This 5-year interim plan sets the goal about the generation, and distribution of hydroelectricity in Nepal which is directly related to this project.
14.	**United Nations Framework Convention on Climate Change (UNFCCC), 1992**	UNFCCC, Signatories: 165. Parties: 195. (1), Article (4), commitment (f) states climate change considerations into account, to the extent feasible, in their relevant social, economic, and environmental policies, and actions, and employ appropriate methods, for example, impact assessments, formulated, and determined nationally, to minimize adverse effects on the economy, on public health, and the quality of the environment, of Subprojects or measures undertaken by them to mitigate or adapt to climate change. After it entered into force on 21 March 1994, it mandates the individual state for prioritization of resource conservation with development.	The goal of this project is to replace the traditional form of energy with clean energy i.e. electricity which ultimately reduces air pollution, and smoke.
15.	**ILO 169**	The main objective of this convention is to secure the rights of indigenous, and tribal people along with the gender equality, and non-discrimination of workers during work. Article 1 on the First Part of this convention mainly focused on the following points: (a) the social, cultural, and economic conditions of tribal peoples in independent countries	Nepal is the part of ILO convention that's why ILO 169 should strictly follow during construction, and implementation of any types

		differentiate from other parts of the national community, and their status is managed fully or partially by their customs or traditions or by special laws or regulations; (b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries, and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions. ● Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply. ● The use of the term people in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law.	
16.	**Environment and Social Management Framework**	● ESMF is to guide DSUEP sub-projects in the area of E&S management using appropriate instruments, methodologies, procedure and responsibilities during the project cycle. NEA and the project partners shall apply during design and development of the sub-projects in order to comply with the Government of Nepal E&S regulations and the Financiers' standards on E&S assessment and management, Involuntary Resettlement, Indigenous People, Gender, etc.).	Main guiding document for E&S study to identify issues and recommending appropriate practical augmentation/ mitigation measures
17.	**Environmental and Social Policy (ESP)**	● This policy speaks for the mandatory E&S requirements for each Project like, screening, DDR, E&S Assessment, ESMP, ESMF, Information Disclosure, Consultation and Monitoring and Evaluation.	Mandatory requirement for ESMP study
18.	**Environmental and Social Standards of AIIB** [11]	● Three associated mandatory environmental and social standards (ESSs) set out more detailed environmental and social requirements relating to the ESMP	ESMP requirement

[11] *https://www.aiib.org/en/policiesstrategies/download/environmentframework/20160226043633542.pdf*

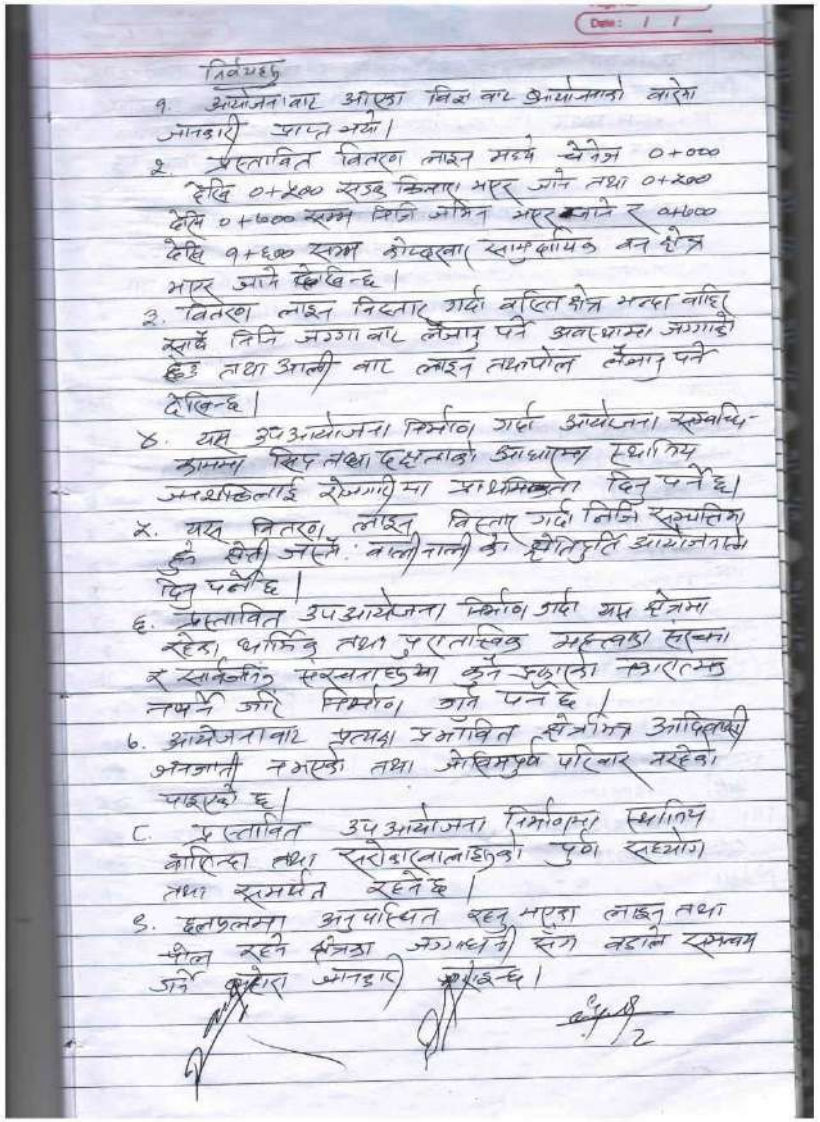
Annex 5: CONSULATATION MEETING MINUTES



आज मिति २०७८ साल पुस १५ गतेका दिन मा कालिकोट जिल्ला खाँडाचक्र नगरपालिका वार्ड नं ९ मा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गइरहेको मान्मा रास्कोट विद्युत वितरण लाइन उपआयोजना अन्तर्गत वितरण लाइन निर्माण को विस्तृत जानकारी गरी, जैविक र सामाजिक, आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सक्ने प्रभावबारे हामी निम्न स्थानीय बासिन्दा तथा आयोजनाबाट उपस्थित विज्ञले देहाय बमोजिमको छलफल र निर्णय गरेका छौं ।

उपस्थिति :

क.सि.	नाम	ठेगाना	फोन	दस्तखत
०१)	[illegible]	खाँडाचक्र नगरपालिका वडा अध्यक्ष	९८४८२०११४६	
०२)	प्रेम [illegible]	स्थानिय	९८४८३०१६०२	
०३)	भान [illegible]	"	९८४८३०६००१	
०४)	प्रेम [illegible]	"	-	
०५)	[illegible]	"	-	
०६)	[illegible]	"	-	
०७)	[illegible]	"	-	
०८)	[illegible]	"	-	
०९)	[illegible]	"	-	
१०)	[illegible]	"	९८४८३४८१४२	
११)	[illegible]	"	९८४८३४४८३१	
१२)	[illegible]	"	-	
१३)	[illegible]	"	-	
१४)	[illegible]	"	९८४८३३६१६०	
१५)	कृष्ण दाहाल	सञ्चारकर्मी (NEA EC)		
१६)	सुरज [illegible]	वातावरणविद् (NEA EC)		
१७)	राम प्रसाद [illegible]	वातावरणविद् (NEA EC)		
१८)	यमलाल [illegible]	समाजशास्त्री (NEA EC)		
१९)	तक्षक नि. क			



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१. आयोजनाबारे आएका विज्ञबाट आयोजनाको बारेमा जानकारी प्राप्त भयो ।

२. प्रस्तावित वितरण लाइन मध्ये चैनेज 0+000 देखि 0+२०० सम्म खेतबारी भएर जाने तथा 0+२०० देखि 0+६०० सम्म खिर्रो जंगल भएर जाने र 0+६०० देखि 9+६०० सम्म कोच्छला सामुदायिक वन क्षेत्र भएर जाने देखिन्छ ।

३. वितरण लाइन निर्माण गर्दा बस्ति क्षेत्र भन्दा बाहिर खाँदै जिर्ण जग्गाबाट लैजाने पर्ने अत्यधिक जग्गाहरु छुने तथा आली बाट लाइन लगिएमा लैजाने पर्ने देखिन्छ ।

४. यस उपआयोजना निर्माण गर्दा आयोजना सम्बन्धि कामका लिए तथा छलफलको आधारमा स्थानिय जनशक्तिलाई रोजगारीमा प्राथमिकता दिनु पर्ने छ ।

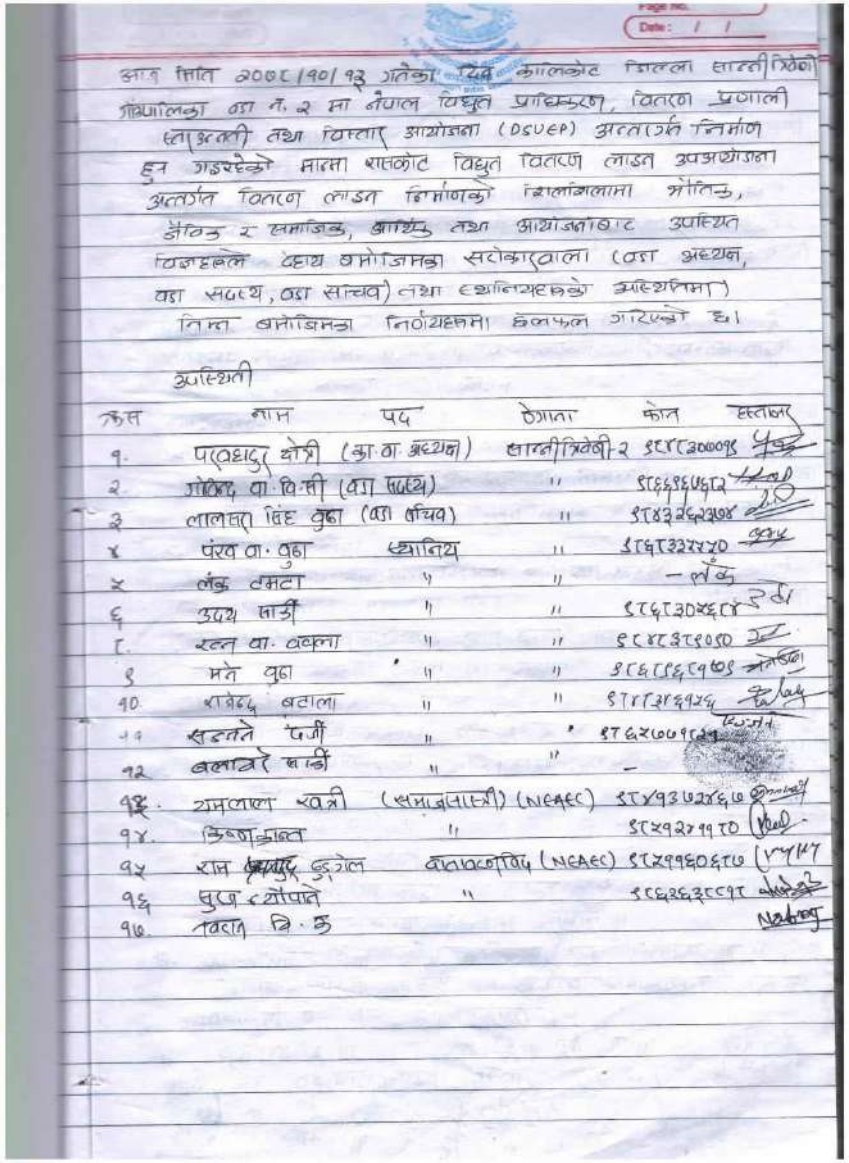
५. यस वितरण लाइन निर्माण गर्दा निजि सम्पत्तिमा हुने क्षति जस्तै : बाली नाली को क्षतिपुर्ति आयोजनाले दिनु पर्नेछ ।

६. प्रस्तावित उपआयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना र सार्वजनिक सरसफाइमा कुनै प्रकारको नकारात्मक असर नपर्ने गरी निर्माण गर्नु पर्नेछ ।

७. आयोजनाबाट प्रत्यक्ष प्रभावित क्षेत्रमा आदिवासी जनजाती समुदाय तथा जोखिममुख परिवार रहेका पाइएको छ ।

८. प्रस्तावित उपआयोजना निर्माणमा स्थानिय बासिन्दा तथा स्थानीय निकायको पुर्ण सहयोग तथा समर्थन रहेको छ ।

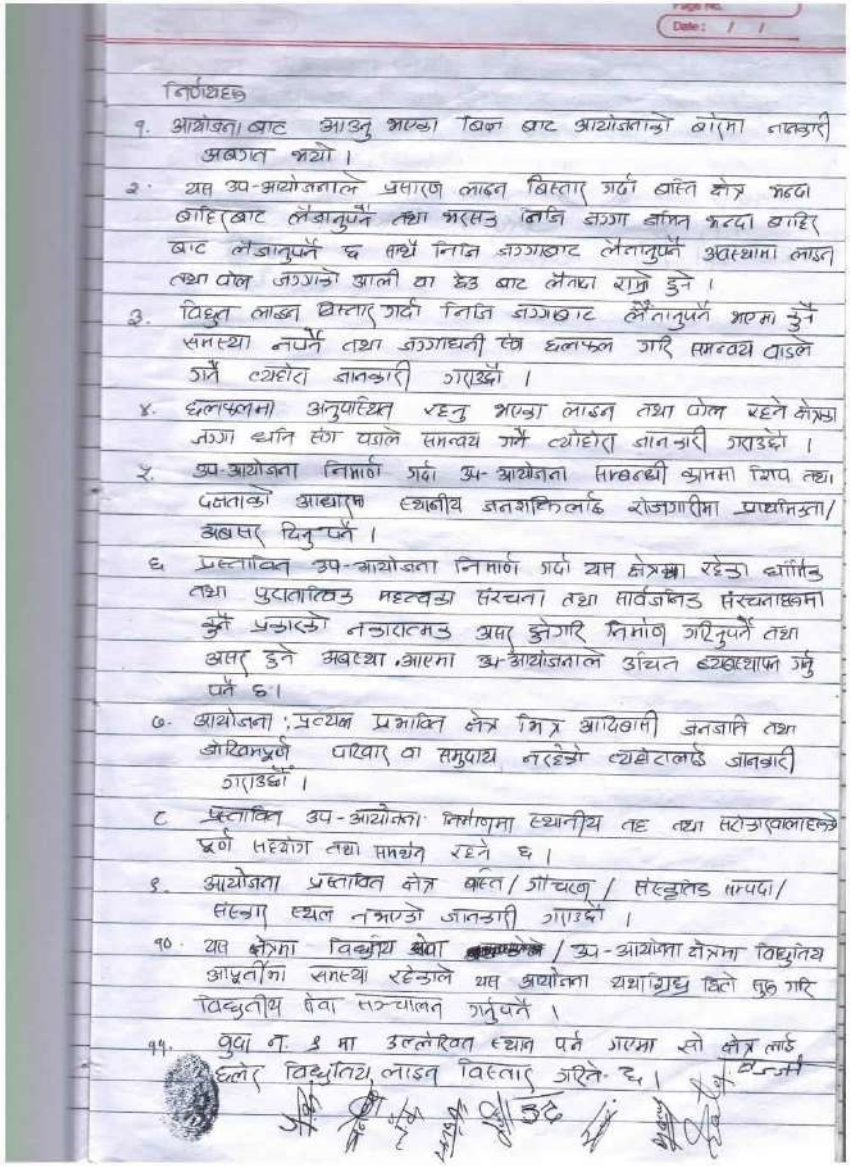
९. छलफलमा अनुपस्थित रहनु भएका लाइन तथा पोल पर्ने क्षेत्रका जग्गाधनी लगायत सरोकारवाला सबैलाई जानकारी गराउनु पर्ने देखिन्छ ।



आज मिति २०७८/१०/१३ गतेका दिन कालिकोट जिल्ला सान्नीत्रिवेणी गाउँपालिका वडा नं. २ मा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गइरहेको मानमा रास्कोट विद्युत वितरण लाइन उपआयोजना अन्तर्गत वितरण लाइन निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक, आर्थिक तथा आयोजनाबाट प्रभावित जिल्लास्तरीय क्षेत्रीय आयोजनाको सरोकारवाला (वडा अध्यक्ष, वडा सदस्य, वडा सचिव) तथा स्थानियवासीको उपस्थितिमा आयोजनाको निर्णयहरूमा छलफल गरिएको छ।

उपस्थिती

क्रम	नाम	पद	ठेगाना	फोन	हस्ताक्षर
१.	परबहादुर कोरी (वडा वडा अध्यक्ष)	सान्नीत्रिवेणी-२	९८४३००००९	
२	गोविन्द वा विसी (वडा सदस्य)	"	९८६९६५६५२	
३	लालसरा सिंह बुढा (वडा सचिव)	"	९८४३६२३१०४	
४	पंरव वा. बुढा	स्थानिय	९८६२३२४४४०	
५	लंकु दमटा	"	"	-
६	उदय साउँ	"	"	९८६२३०४६८४
८.	रत्न वा. वक्ता	"	"	९८४८३८९०५०
९	मते बुढा	"	"	९८६८९६८१७९
१०.	धरेन्द्र बटाला	"	"	९८२२४६१४६
११	सन्ते पर्जी	"	"	९८६२७०९८४
१२	बलाखे साउँ	"	"	-
१३.	यमलाल खत्री	(समाजसास्त्री) (NEAEC)	९८४९३७२४६७	
१४.	कृष्णबहादुर	"	९८४९२४१९२०	
१५	राम [illegible] ढुङ्गेल	वातावरणविद् (NEAEC)	९८४९९६०६८७	
१६	सुरज थापाले	"	९८६४६३८८९२	
१७.	नवराज वि. क			



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१. आयोजना बाट आउनु भएको विभिन्न बाट आयोजनाको बारेमा जानकारी अवगत गर्नु भयो।

२. यस उप-आयोजनाले प्रसारण लाइन विस्तार गर्दा बस्ति क्षेत्र भएर बाहिरबाट लैजानुपर्ने तथा भरसक बिजुली जग्गा जमिन भएर बाहिर बाट लैजानुपर्ने र यदि निजि जग्गाबाट लैजानुपर्ने अवस्थामा लाइन तथा पोल जग्गाको आली वा डेड बाट लैजाने राख्नु हुने।

३. विद्युत लाइन विस्तार गर्दा निजि जग्गाबाट लैजानुपर्ने भएमा कुनै समस्या नपर्ने तथा जग्गाधनी संग छलफल गरि समन्वय गरेर जाने बारेमा जानकारी गराइयो।

४. छलफलमा अनुपस्थित रहनु भएका लाइन तथा पोल रहने क्षेत्रका जग्गा धनि संग यथाले समन्वय गर्ने बारेमा जानकारी गराइयो।

५. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धी आदमा सिप तथा क्षमताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता/अवसर दिनुपर्ने।

६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनालाई कुनै प्रकारको नकारात्मक असर हुनेगरि निर्माण गरिनुपर्ने तथा असर हुने अवस्था आएमा उप-आयोजनाले उचित व्यवस्थापन गर्नु पर्ने छ।

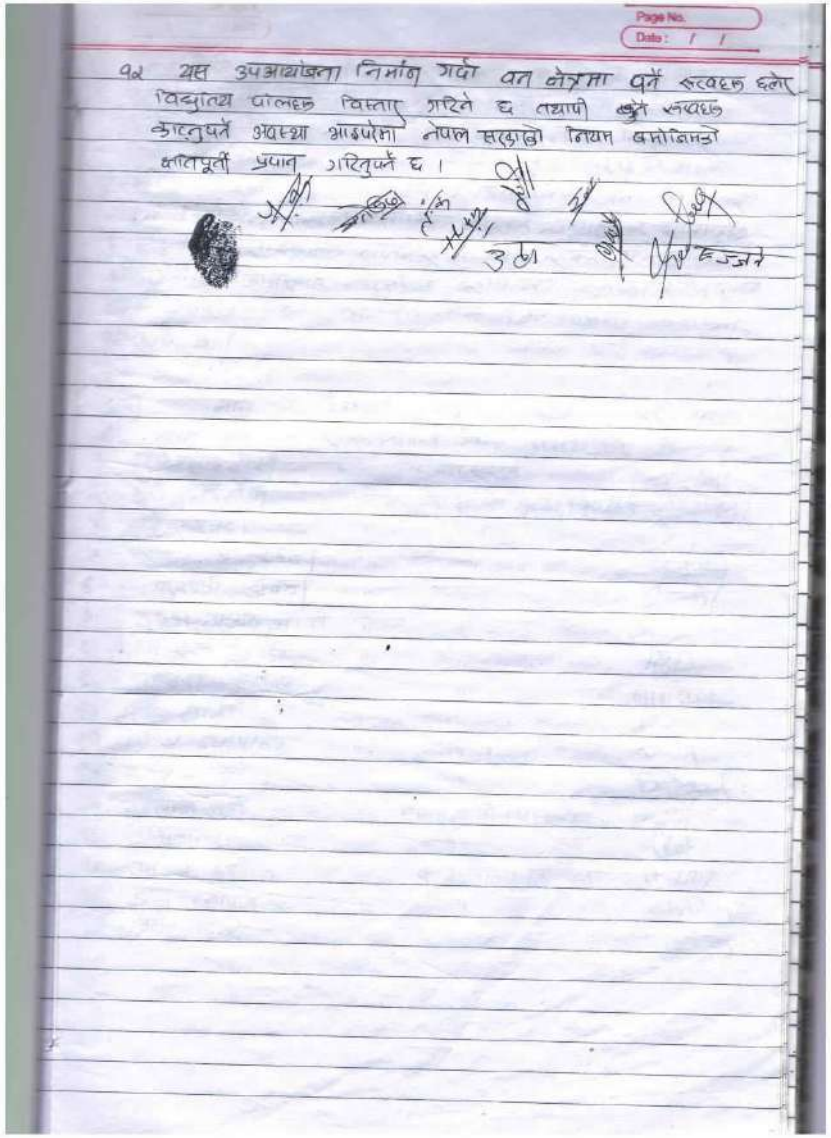
७. आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजाति तथा जोखिमपूर्ण परिवार वा समुदाय नरहेको बारेमा जानकारी गराइयो।

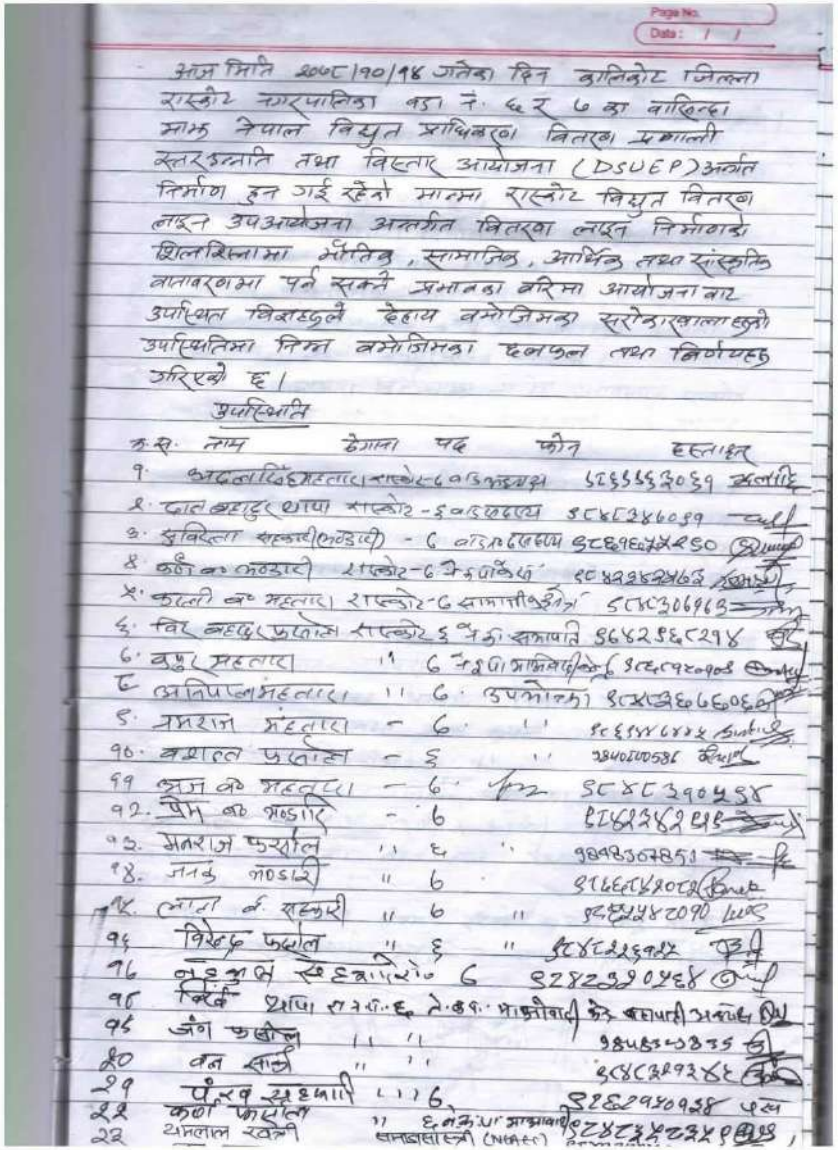
८. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय तह तथा सरोकारवालाहरुले पूर्ण सहयोग तथा समन्वय गर्ने छ।

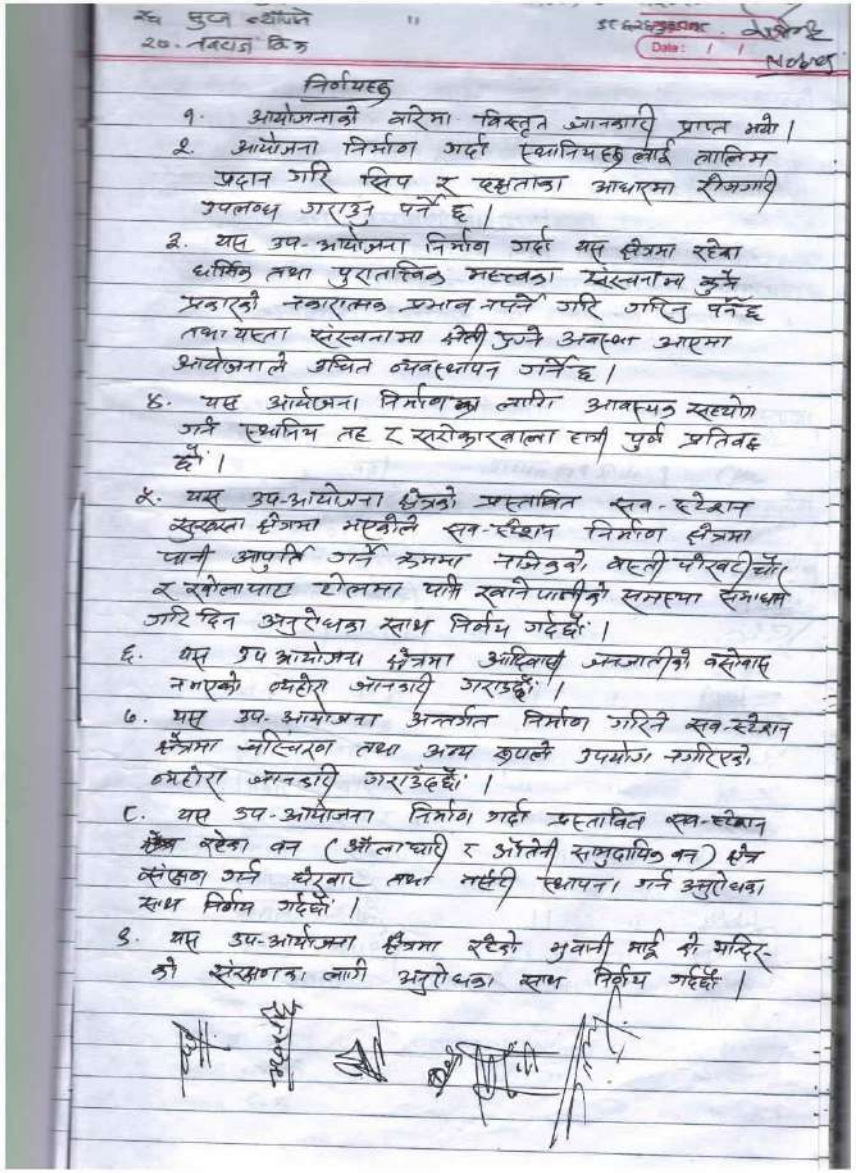
९. आयोजना प्रस्तावित क्षेत्र बारे / जाँचबुझ / सम्पदा / सम्पदा स्थल नभएको जानकारी गराइयो।

१०. यस क्षेत्रमा विद्युतीय सेवा [illegible] / उप-आयोजना क्षेत्रमा विद्युतीय आपूर्तीमा समस्या रहेकाले यस आयोजना यथाशीघ्र छिटो पुरा गरि विद्युतीय सेवा सञ्चालन गर्नुपर्ने।

११. बुदा नं. ९ मा उल्लेखित स्थान पर्ने भएमा सो क्षेत्र लाई छोडेर विद्युतिय लाइन विस्तार गरिने छ।

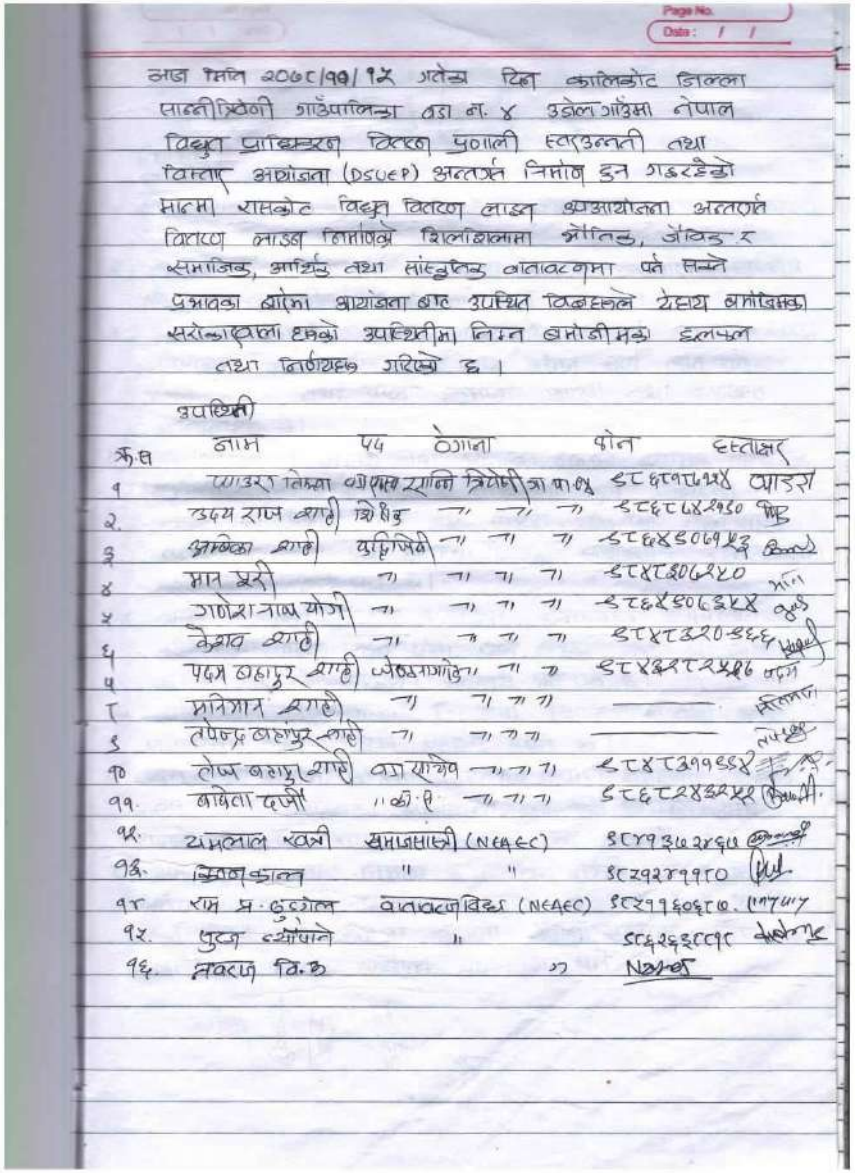






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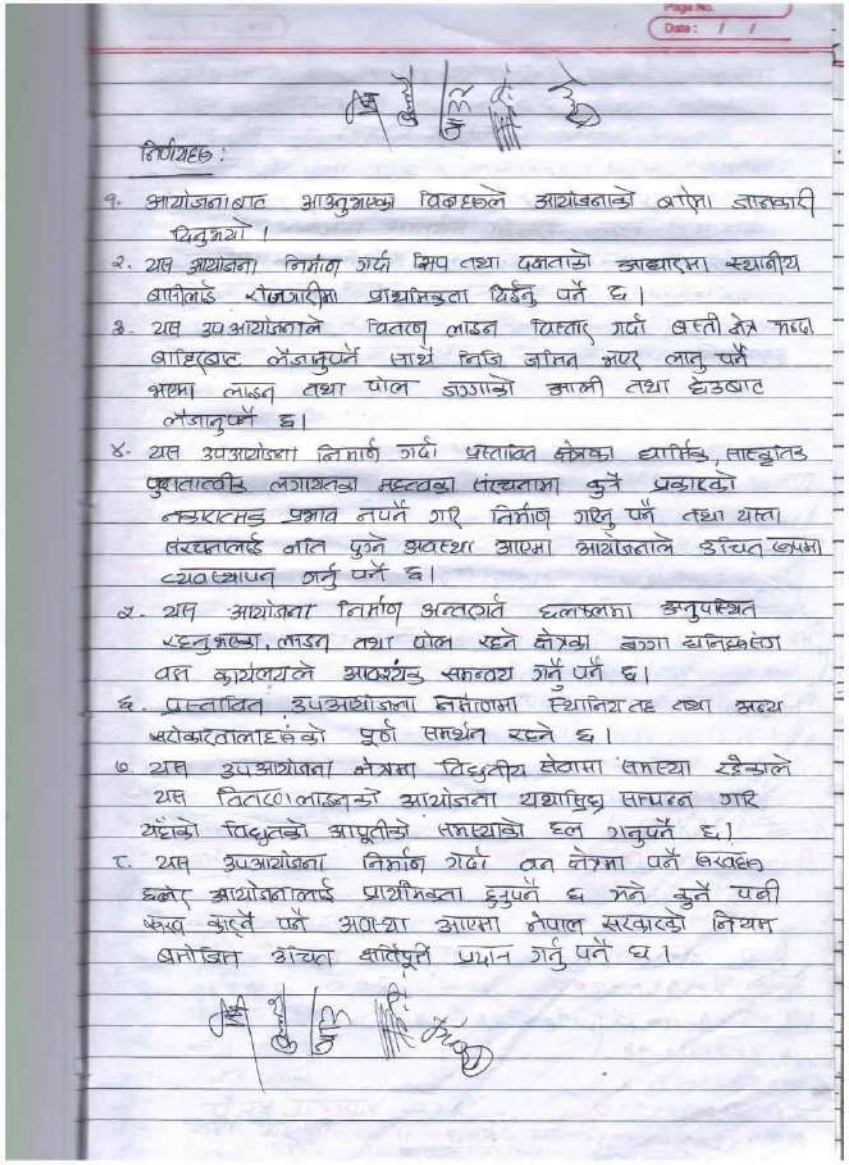
१. आयोजनाको बारेमा विस्तृत जानकारी प्राप्त भयो ।
२. आयोजना निर्माण गर्दा स्थानियहरुलाई तालिम प्रदान गरि रोपि र रक्षताका आधारमा रोजगारी उपलब्ध गराउनु पर्ने ठहर ।
३. यस उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचनामा कुनै प्रकारको नकारात्मक प्रभाव नपर्ने गरि अगाडि बढ्नु पर्ने ठहर तथा यस्ता संरचनामा कोही कुनै असहज आएमा आयोजनाले थप व्यवस्थापन गर्ने ठहर ।
४. यस आयोजना निर्माणका लागि आवश्यक सहयोग गर्ने स्थानिय तह र सरोकारवाला सबै पुर्ण प्रतिबद्ध छौं ।
५. यस उप-आयोजना क्षेत्रको प्रस्तावित सब-स्टेशन सुरक्षण क्षेत्रमा भएकोले सब-स्टेशन निर्माण क्षेत्रमा पानी आपुर्ति गर्ने क्रममा नजिकको बस्ती चौरबटी र खोलाबाट होलमा पानी खाने पानीको समस्या समाधान गरि दिन अनुरोधका साथ निर्णय गर्दछौं ।
६. यस उप आयोजना क्षेत्रमा आदिवासी जनजातीको बसोबास नभएको व्यहोरा जानकारी गराउदछौं ।
७. यस उप-आयोजना अन्तर्गत निर्माण गरिने सब-स्टेशन क्षेत्रमा जग्गाहिरण तथा अन्य कुनैपनि उपभोग नगरिएको व्यहोरा जानकारी गराउदछौं ।
८. यस उप-आयोजना निर्माण गर्दा प्रस्तावित सब-स्टेशन क्षेत्र बहेडा वन (औलाचौरी र औतेनी सामुदायिक वन) क्षेत्र संरक्षण गर्ने धारणा तथा नर्सरी स्थापना गर्ने अनुरोधका साथ निर्णय गर्दछौं ।
९. यस उप-आयोजना क्षेत्रमा रहेको भुवनी माई को मन्दिरको संरक्षणका लागी अनुरोधका साथ निर्णय गर्दछौं ।



आज मिति २०६८/११/१५ गतेका दिन कालिकोट जिल्ला सान्नीत्रिवेणी गाउँपालिका वडा नं. ४ उडेलगाउँमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरउन्नती तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गइरहेको मान्मा रास्कोट विद्युत वितरण लाइन आयोजना अन्तर्गत वितरण लाइन निर्माणको शिलान्यासमा स्थानिय, जोखिम र सामाजिक, आर्थिक तथा सांस्कृतिक वातावरणमा पर्न सक्ने प्रभावका बारेमा आयोजना क्षेत्र उपस्थित विद्यार्थिहरुले रहेछ आयोजनाका सरोकारवाला हरुको उपस्थितीमा निम्न छलफल तथा निर्णयहरु गरिएको छ ।

उपस्थिती

क्र.स	नाम	पद	ठेगाना	फोन	हस्ताक्षर
१	[illegible]	[illegible]	[illegible]	९८४७८५४४	[illegible]
२	उदय राज आचार्य	शिक्षक	"	९८६८४२९३०	[illegible]
३	अम्बिका आचार्य	गृहिणी	"	९८६४९०६१४३	[illegible]
४	मान प्रसाद	"	"	९८४८३०६२४०	[illegible]
५	गणेश नाथ योगी	"	"	९८६४९०६३४४	[illegible]
६	केशव आचार्य	"	"	९८४८३२०३६६	[illegible]
७	पदम बहादुर आचार्य	जेष्ठनागरिक	"	९८४३४८२५४६	[illegible]
८	प्रतिनिधि आचार्य	"	"	———	[illegible]
९	तेपेन्द्र बहादुर आचार्य	"	"	———	[illegible]
१०	लेख बहादुर आचार्य	वडा सदस्य	"	९८४८३७१९९४	[illegible]
११	बासेता पन्जी	"	"	९८६८२४३२४१	[illegible]
१२	धनलाल खत्री	समाजसास्त्री (NEAEC)		९८४१३७२४६७	[illegible]
१३	शिवकान्त	"	"	९८२९२१९१८०	[illegible]
१४	राम प्र. कुर्मोल	वातावरणविद्ध (NEAEC)		९८४१६०६१७.	[illegible]
१५	पुरुज ढकाल	"	"	९८६२६६८१९८	[illegible]
१६	नवराज वि.क	"	"	९८४७	[illegible]



निर्णयहरु :

१. आयोजनाबाट आवश्यक विकासका आयोजनाको लागि ध्यानाकर्षण गरिनुपर्ने ।

२. यस आयोजना निर्माण गर्दा मिप तथा ठेकेदारको आधारमा स्थानीय बासिन्दाले रोजगारीमा प्राथमिकता दिईनु पर्ने छ ।

३. यस उपआयोजनाले वितरण लाइन विस्तार गर्दा बस्ती क्षेत्र भन्दा बाहिरबाट लैजानुपर्ने भएमा निजि जग्गा परे लानु पर्ने भएमा लाइन तथा पोल ठाउँहरु खाली तथा क्षेत्रफल लैजानुपर्ने छ ।

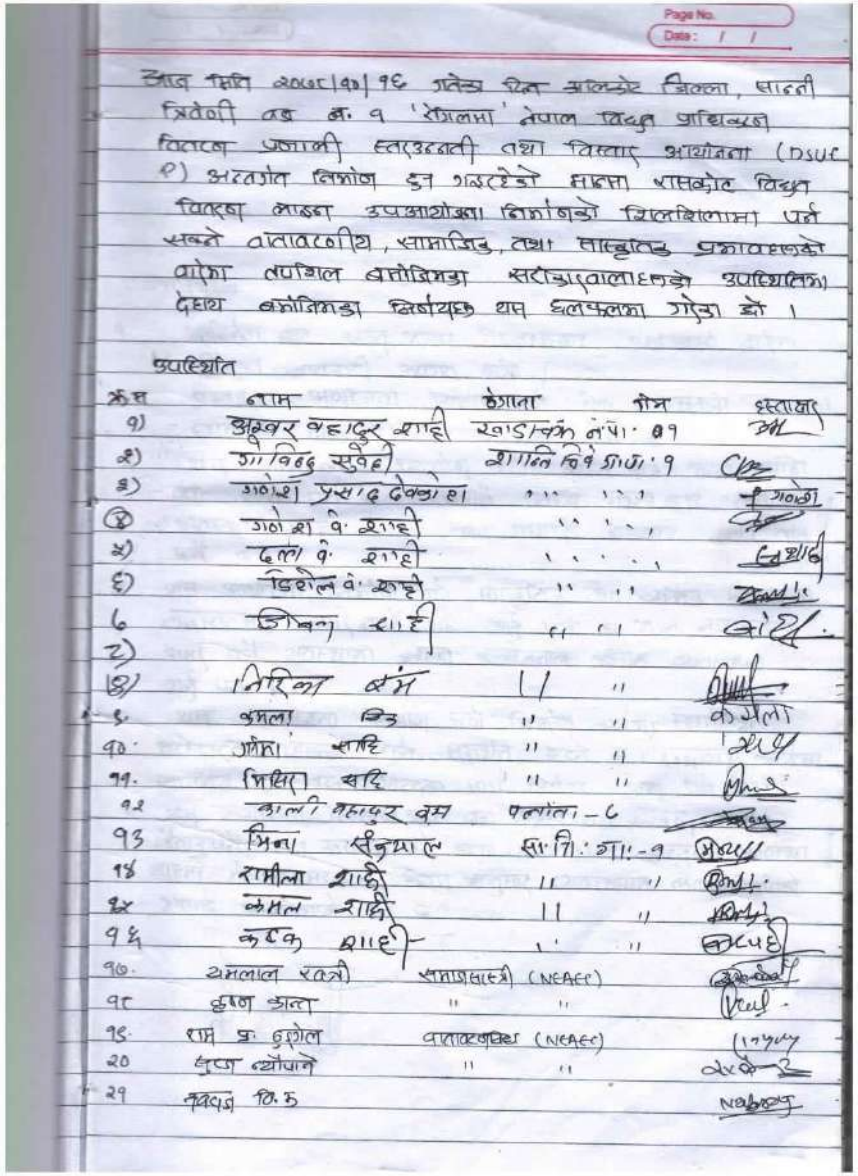
४. यस उपआयोजना निर्माण गर्दा प्रस्तावित क्षेत्रका धार्मिक, सांस्कृतिक पुरातात्वीक लगायतका सम्पदाका संरचनामा कुनै प्रकारको नकारात्मक प्रभाव नपर्ने गरि निर्माण गरिनु पर्ने तथा यस्ता संरचनालाई गति पुर्ने अवस्था आएमा आयोजनाले उचित उपयुक्त व्यवस्थापन गर्नु पर्ने छ ।

५. यस आयोजना निर्माण अन्तर्गत घरजग्गा अनुपस्थित रहनुभएका, लाइन तथा पोल रहने क्षेत्रका जग्गा धनिहरुका यस कार्यालयले आवश्यक समन्वय गर्नु पर्ने छ ।

६. प्रस्तावित उपआयोजना निर्माणमा स्थानियवह तथा अन्य सरोकारवालाहरुको पूर्ण समर्थन रहने छ ।

७ यस उपआयोजना क्षेत्रमा विद्युतीय सेवामा समस्या रहेकाले यस वितरण लाइनको आयोजना यथाशिघ्र सम्पन्न गरि यहाँको विद्युतको आपूर्तीको समस्याको हल गरिनुपर्ने छ ।

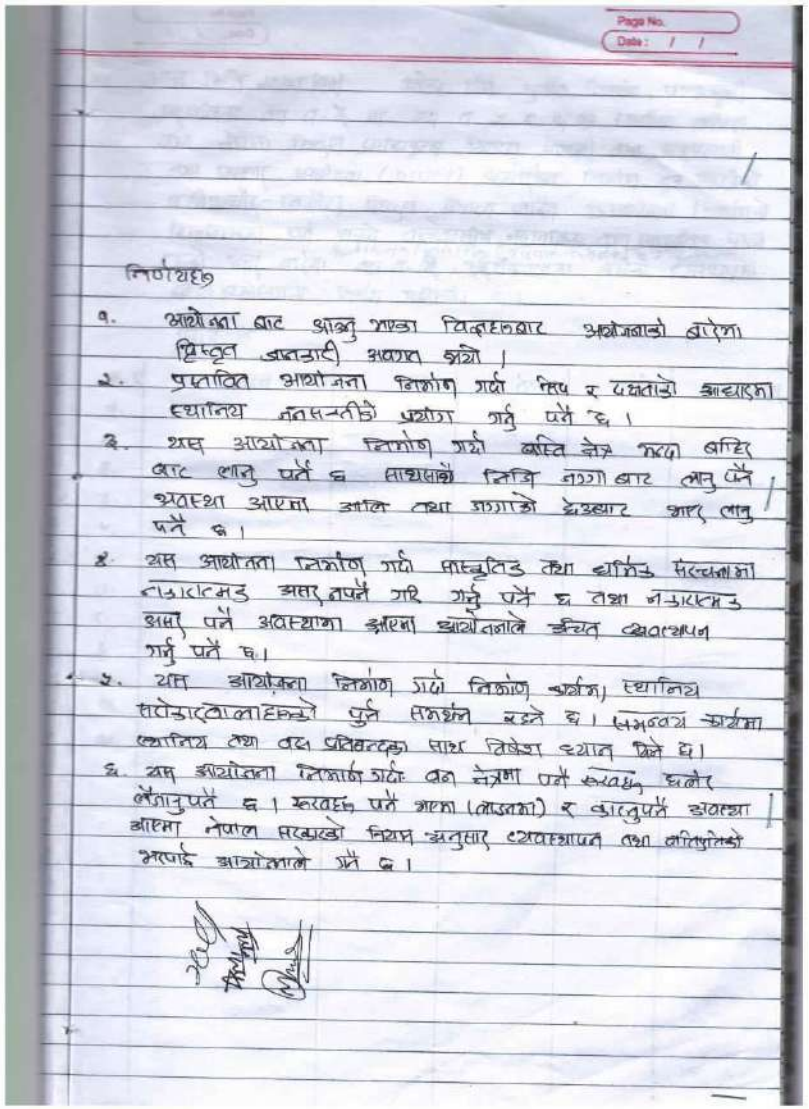
८. यस उपआयोजना निर्माण गर्दा वन क्षेत्रमा पर्ने भएकाले यस आयोजनालाई प्राथमिकता हुनुपर्ने छ भने कुनै पनी रुख काट्ने पर्ने अवस्था आएमा नेपाल सरकारको नियम बमोजिम उचित क्षतिपूर्ति प्रधान गर्नु पर्ने छ ।



आज मिति २०७८/७१/१६ गतेका दिन अलिडेह जिल्ला, साहती श्रितेणी वडा नं. ९ 'रोजलमा' नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरउन्नती तथा विस्तार आयोजना (DSUE P) अन्तर्गत निर्माण हुन गइरहेको साल्मा रासकोट विद्युत वितरण लाइन उपआयोजना निर्माणको सिलसिलामा पर्न सक्ने वातावरणीय, सामाजिक, तथा सांस्कृतिक प्रभावहरुको बारेमा तपशिल बमोजिमका सरोकारवालाहरुको उपस्थितिमा देहाय बमोजिमका निर्णयहरु यस छलफलमा गरिएका छन् ।

उपस्थिति

क्र.स	नाम	ठेगाना	पेशा	हस्ताक्षर
१)	अम्बर बहादुर शाही	खाडाचक्र नं.पा. ७१		
२)	गा.वि.स. सुवेदी	शान्ति वि.वे गा.पा. ९		
३)	गोपाल प्रसाद ढकाल	" "		
४)	गोपाल बं. शाही	" "		
५)	दुला बं. शाही	" "		
६)	छिडोल बं. शाही	" "		
७)	जिवन शाही	" "		
८)				
९)	मिरिका वर्म	" "		
१०.	कमला "	" "		कमला
११.	गीता "	" "		
१२.	शिशिरा "	" "		
१३	काली बहादुर वम	पलाता - ८		
१४	मिना संकुयाल	सा.वि.गा.पा. - ९		
१५	रामीला शाही	" "		
१६	कमल शाही	" "		
१७	कटक शाही	" "		
१८.	अमलाल रकती	सामाजसाक्षी (NEAEC)		
१९	कृष्ण अन्ता	" "		
२०.	राम प्र. ढुंगेल	वातावरणविद (NEAEC)		
२१	कृपा चौधरी	" "		
२२	नवराज वि.क			



निर्णयहरु

१. आयोजना वारे आवश्यक जानकारी आयोजकबाट बुझेपछि विस्तृत जानकारी आदान प्रदान भयो ।

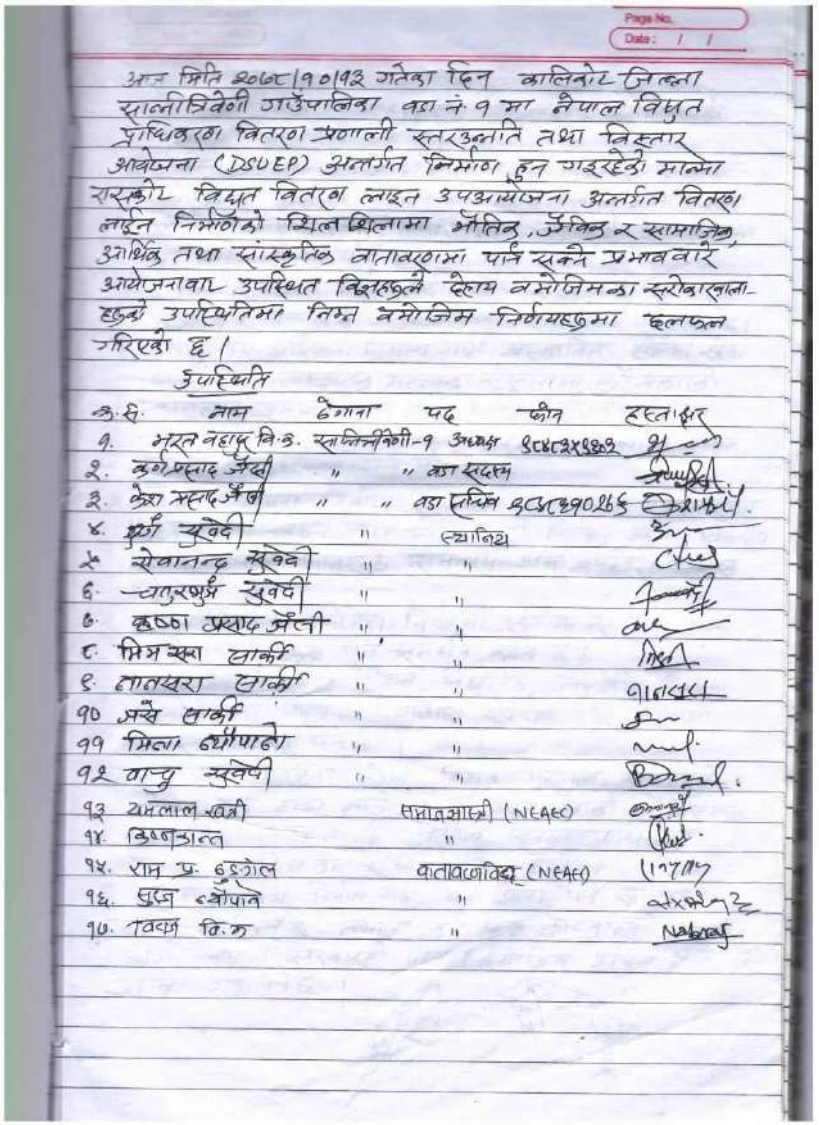
२. प्रस्तावित आयोजना निर्माण गर्दा गर्न पर्ने र बचाउनुपर्ने आधारहरु स्थानीय जनसहभागीबाट प्रस्ताव गर्नु पर्ने छ ।

३. यस आयोजना निर्माण गर्दा बस्ति क्षेत्र भन्दा बाहिर बाट लान पर्ने छ साथसाथै विद्युत लाइन बाट लाग्ने पर्ने / अवरोध आउने आदि तथा आवश्यक हेरचाहबारे बाट लान पर्ने छ ।

४. यस आयोजना निर्माण गर्दा सांस्कृतिक तथा धार्मिक संरचनामा नोक्सानदायक असर नपर्ने गरि गर्नु पर्ने छ तथा नोक्सानदायक असर पर्ने अवस्थामा आवश्यक आयोजनाले उचित व्यवस्थापन गर्नु पर्ने छ ।

५. यस आयोजना निर्माण गर्दा निर्माण कार्यमा स्थानिय संघसंस्थाहरुलाई पुर्ण सहभागि गराउने छ । समन्वय कार्यमा स्थानिय तथा वडा प्रतिनिधिको साथ विशेष ध्यान दिने छ ।

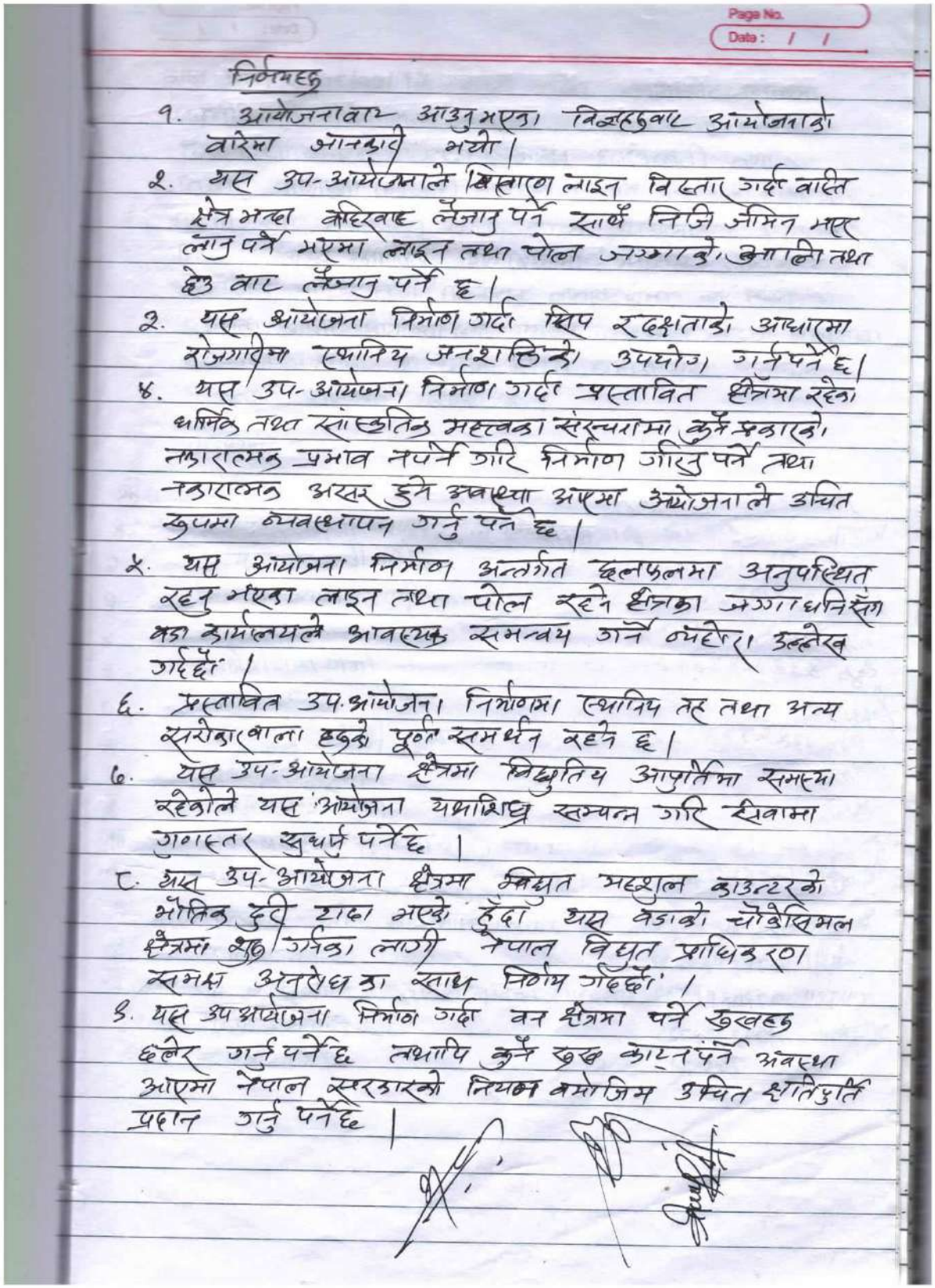
६. यस आयोजना निर्माण गर्दा वन क्षेत्रमा पर्ने रुखबृक्ष छनौट गर्नुपर्ने छ । रुखबृक्ष पर्ने अवस्था (मोडमा) र कटानुपर्ने अवस्था आदमा नेपाल सरकारको नियम अनुसार व्यवस्थापन तथा क्षतिपुर्तिको भरपाई आयोजनाले पर्ने छ ।



आज मिति २०८८/१०/१२ गतेका दिन कालिकोट जिल्ला शान्तिवेणी गाउँपालिका वडा नं ९ मा नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गइरहेको मान्मा रास्कोट विद्युत वितरण लाइन उपआयोजना अन्तर्गत वितरण लाईन निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक, आर्थिक तथा सांस्कृतिक वातावरणमा पार्न सक्ने प्रभाववारे आयोजनाबाट उपस्थित विज्ञहरुले पेश गर्नुभएको प्रस्तावको उपस्थितिमा निम्न बमोजिम निर्णयहरुमा छलफल गरिएको हो ।

उपस्थिति

क.नं.	नाम	पेशा	पद	फोन	हस्ताक्षर
१.	भरत बहादुर वि.क.	शान्तिवेणी-९ अध्यक्ष		९८४८३४९४९२	
२.	कृष्णप्रसाद जैशी	"	" वडा सदस्य		
३.	केशव प्रसाद जैशी	"	" वडा सचिव	९८४८६९०४६६	
४.	पूर्ण खबेदी	"	स्थानिय		
५.	योगानन्द खबेदी	"	"		
६.	चतुरभुज खबेदी	"	"		
७.	कृष्ण प्रसाद जैशी	"	"		
८.	मिनरुवा लार्की	"	"		
९.	लालबरा लार्की	"	"		
१०.	सर्वे लार्की	"	"		
११.	मिना धौपाटो	"	"		
१२.	बाबु खबेदी	"	"		
१३.	यमलाल खबी	समाजसेवी (NEAEC)			
१४.	कृष्णकान्त	"			
१५.	राम प्र. ढकाल	वातावरणविद् (NEAEC)			
१६.	सुजन धौपाटे	"			
१७.	नवराज वि.क.	"			



निर्णयहरू

१. आयोजनाबाट आउनसक्ने विभिन्नखाले आयोजनाहरू बारेमा जानकारी भयो।

२. यस उप-आयोजनाले विद्युतीय लाइन विछ्याउन जग्गा वास्ते क्षेत्रभन्दा बाहिरबाट लैजानु पर्ने सार्थै निजि जमिन भएर लानु पर्ने भएमा लाइन तथा पोल जग्गाको क्षतिपूर्ति तथा छेउ बाट लैजानु पर्ने छ।

३. यस आयोजना निर्माण गर्दा क्षिप रहक्षताको आधारमा रोजगारीमा स्थानिय जनशक्तिको उपयोग गर्नुपर्ने छ।

४. यस उप-आयोजना निर्माण गर्दा प्रस्तावित क्षेत्रमा रहेका धार्मिक तथा सांस्कृतिक महत्वका संरचनामा कुनै प्रकारको नकारात्मक प्रभाव नपर्ने गरि निर्माण गरिनु पर्ने तथा नकारात्मक असर हुने अवस्था आएमा आयोजनाले उचित रुपमा व्यवस्थापन गर्नु पर्ने छ।

५. यस आयोजना निर्माण अन्तर्गत फलफलमा अनुपस्थित रहनु भएका लाइन तथा पोल रहने क्षेत्रका जग्गाधनिसँग वडा कार्यालयले आवश्यक समन्वय गर्ने व्यहोरा उल्लेख गरिएको।

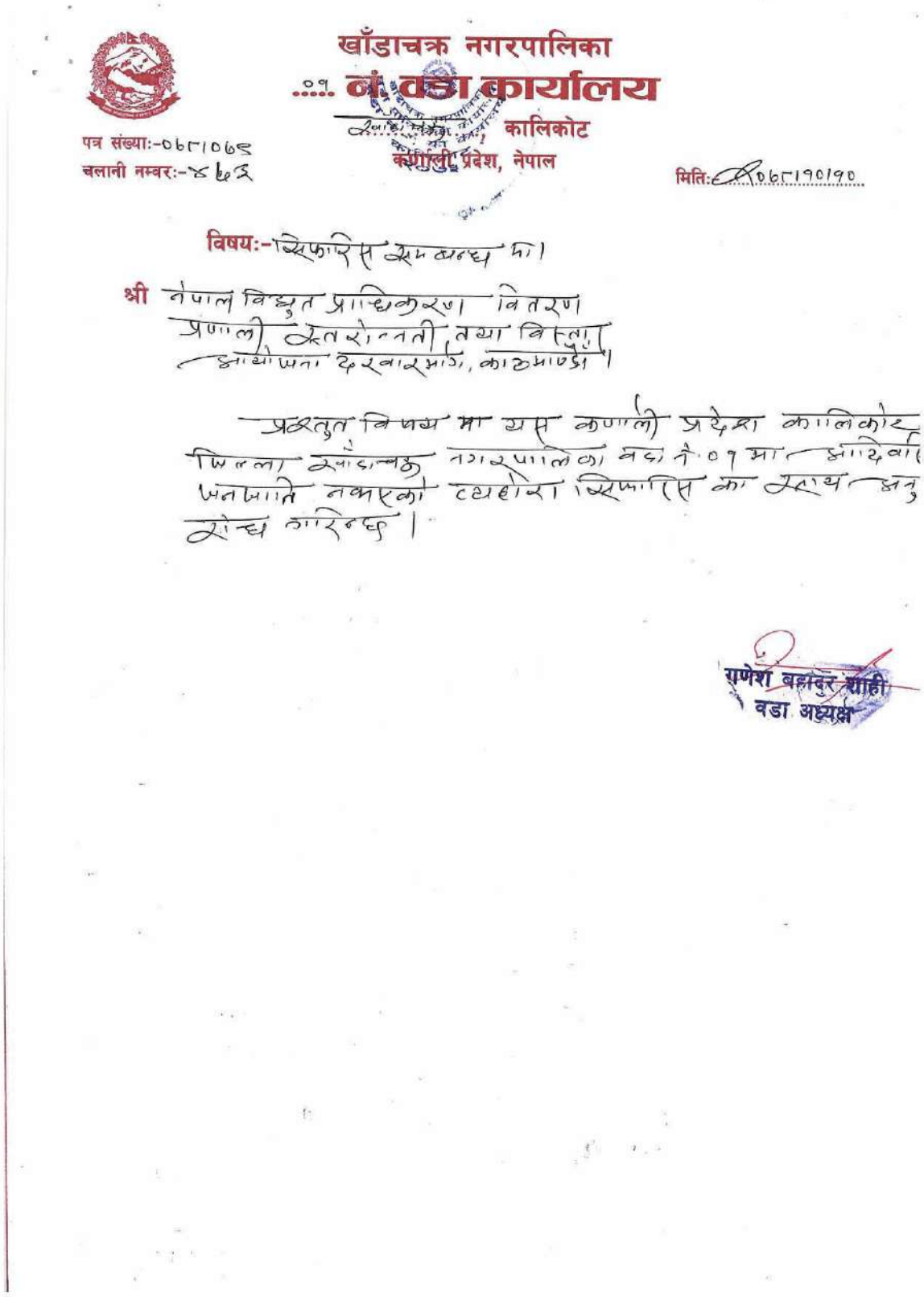
६. प्रस्तावित उप-आयोजना निर्माणमा स्थानिय तह तथा अन्य सरोकारवाला निकायको पूर्ण समर्थन रहेको छ।

७. यस उप-आयोजना क्षेत्रमा विद्युतिय आपुर्तिमा समस्या रहेकोले यस आयोजना यथाशिघ्र सम्पन्न गरि दिनमा गुनासो सुनिनु पर्नेछ।

८. यस उप-आयोजना क्षेत्रमा विद्युत सहायक काउन्टरको भौतिक दुरी टाढा भएको हुँदा यस वडाको चौबेसिमल क्षेत्रमा शुल्क जम्मा लाग्ने नेपाल विद्युत प्राधिकरण समक्ष अनुरोध गरिएको।

९. यस उपआयोजना निर्माण गर्दा वन क्षेत्रमा पर्ने रुखहरु छनोट गर्नु पर्नेछ तथापि कुनै रुख काट्नुपर्ने अवस्था आएमा नेपाल सरकारको नियम बमोजिम उचित क्षतिपुर्ति प्रदान गर्नु पर्नेछ।

Annex 6: DEED OF ENQUIRY (MUCHULKAS)



खाँडाचक्र नगरपालिका
वडा कार्यालय
कालिकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्याः-०६८।०६९
चलानी नम्बरः-४६२

मितिः २०६८।१०।१०

विषयः-सिफारिस सम्बन्ध मा।

श्री नेपाल विद्युत प्राधिकरण वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना दरबारमार्ग, काठमाण्डौ।

प्रस्तुत विषय मा यस कर्णाली प्रदेश कालिकोट जिल्ला खाँडाचक्र नगरपालिका वडा नं. ०१ मा आदेवा जनजाति नक्सको व्यहोरा सिफारिस का लागि अनुरोध गरिन्छ।

गणेश बहादुर शाही
वडा अध्यक्ष

खाँडाचक्र नगरपालिका
वडा कार्यालय
खाँडाचक्र, कालिकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या:-०६८।०६९
चलानी नम्बर:- ४६८

मितिः-२०७८।१०।१०

विषयः- सूचना दाँज गरेको सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण वितरण तथा
ग्राहक सेवा निर्देशनालय कैरवारमार्ग
काभ्रेभवँडा ।

प्रस्तुत विषयमा यस कार्यालय प्रदेश कालिकोट-
जिल्ला खाँडाचक्र नगरपालिका वडा नं०९मा (Asian Infra
tructure Investment Bank (AIIB) को वित्तीय सहयोगमा क
को नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा
निर्देशनालय वितरण प्रणाली सुदृढीकरण तथा विस्तार
आयोजना (DSUEP) प्रस्तावक रही कार्यान्वयन गर्ने
को लाग्दिएको मान्म रास्कोट विद्युत वितरण लाइ
आयोजना को कार्यान्वयन हुँदा आउने सम्भा
भावना तथा अनुभवको बारेमा तथा सामाजिक प्रभाव हुन
मा के कस्ता प्रभाव पार्दछ भनिएको सूचना दाँज गरि
यो ।

गणेश बहादुर शाही
वडा अध्यक्ष

सान्नी त्रिवेणी गाउँपालीका

१ नं. वडा कार्यालय
चौके सिमलरुख
कर्णाली प्रदेश,नेपाल
२०७३

प्रत्र संख्या २०७८/८९ मिति.२०७८/१०/१२
च.न. ९४२

बिषय.सिफारीस सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरवारमार्ग काठमाण्डौं ।

प्रस्तुत विषयमा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना, दरवारमार्ग काठमाण्डौं को च.न १३७ को मिति २०७८/१०/०७ को प्राप्त प्रत्र अनुसार यस वडा न. १ मा आदीबासी जनजाती को बसोबास नभएकाले उक्त योजना कार्यान्वयन मा कुनै खालको असर नपर्ने ब्याहोरा जानकारीको लागी अनुरोध गरीन्छ ।

भरत बहादुर बि.क
वडा अध्यक्ष

भरत बहादुर
वडा अध्यक्ष

सम्पर्क नं.वडा अध्यक्ष:९८४८३५९६०३ वडा सचिव९८४८३९०२७६,वडा प्राविधिक ९८६३२८००७७ सूचना अधिकारी ९८४८३२०१५७
"आज हुने काम आजै गरौ,सेवा ग्राहीको असजलाई मनन राखौ"

सान्नी त्रिवेणी गाउँपालिका

२ नं. वडा कार्यालय

बुट्ठिके रकु ,कालिकोट

कर्णाली प्रदेश नेपाल

प.स. ०७८।०७९ मिती २०७८।१०।१२

च.न. १८९

विषय : सिफारिस सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
दरबारमार्ग काठमाडौं नेपाल ।

प्रस्तुत बिषयमा यस सान्नी त्रिवेणी गा.पा. वडा नं. २ मा आधिबासी जनजाती को बसोबास नभएकाले नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा कार्यान्वयन को लागी यस वडामा केहि असर नहुने भएकाले उक्त आयोजना कार्यान्वयन गर्दा खेरी केहि सम्साया आएमा यस वडा ले सहजिकरण गर्ने व्यहोरा अनुरोध गरिन्छ ।

पर बहादुर क्षेत्री
का.ब. वडा अध्यक्ष

सान्नी त्रिवेणी गाउँपालिका
SANNITRIVENI RURAL MUNICIPALITY
३ नं.वडा कार्यालय
Ward No.3,Office Executive
कालीकोट
Kalikot
कर्णाली प्रदेश, नेपाल
Karnali Province, Nepal

पत्र संख्या : २०७८/०७९ मितिः २०७८/१०/१३
चलानी नं. ९८६

विषयः सिफारीस सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरबार मार्ग काठमाडौ ।

प्रस्तुत विषयमा यो छकी यस सान्नी त्रिवेणी गाउँपालिका वडा नं. ३ को कार्यालयमा मिती २०७८।१०।०७, पत्र संख्या ०७८।०७९ र च. नं १३७ को प्राप्त पत्रानुसार यस वडा को कुनैपनी टोल र बस्तीमा आदिवासी जनजाती को बसोबास नरहेको ब्यहोरा जनाकारीको लागी सिफारीसको साथ अनुरोध गरीन्छ ।

विष्णु प्रसाद देबकोटा
(वडा अध्यक्ष)

Website:www.sannitrivenimun.gov.np Email: hemraj.devkota20750805@gmail.com
सम्पर्क नः वडा अध्यक्षः - ९८६८३८१७५९ वडा सचिव :-९८४८३११७९५
"आज हुने काम आजै गरौ, सेवाग्राहीको असहजतालाई मनन राखौ"

सान्नी त्रिवेणी गाँउपालीका
SANNITRIVENI RURAL MUNICIPALITY
४नं वडा कार्यालय
Ward No 4, Office Executive
कालीकोट, Kalikot
कर्णाली प्रदेश, नेपाल
Karnali Province, Nepal

पत्र सख्या/Letter No: - २०७८/०७९
चलानी.न/Ref No: -२९१

मिति/Date: -२०७८/१०/१३

विषयः – जानकारी सम्बन्धमा ।

श्री नेपाल विधुत प्राधिकरण
वितरण तथा ग्राहक सेवा निर्देशनालय,
नेपाल विधुत प्राणाली स्तरोनती तथा विस्तार आयोजना
दरवारमार्ग ,काठमाण्डौ।

प्रस्तुत विषयमा नेपाल विधुत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय नेपाल विधुत प्राणाली स्तरोनती तथा विस्तार आयोजना दरवारमार्ग काठमाण्डौको च.न. १३७ को मिति २०७८/१०/०७ को प्राप्त पत्रानुसार यस वडा नम्वर ४ मा आदिवासी जनजाती को वसोवास नभएकोले उक्त योजना कार्यन्वयन मा कुनै खालको असर नपर्ने व्यहोरा जानकारीका साथ अनुरोध गरिन्छ।

तेज बहादुर शाही
वडा सचिव

अनिपाल धामी
वडा अध्यक्ष

"आज हुने काम आजै गरौ,सेवाग्राहीको असहजतालाई मनन राखौ"
Website: www.sannitrivenimun.gov.np Email: ito.strm@gmail.com

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना,
दरबारमार्ग, काठमाण्डौ, नेपाल ।

विषयः सूचना टाँस गरिएको सम्बन्धमा ।

उपरोक्त सम्बन्धमा त्यस कम्पनीको मिति २०७८/१०/०६ को प्राप्त पत्रानुसार कर्णाली प्रदेश, कालिकोट जिल्ला, सान्नी त्रिवेणी गाप/नपा ९ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कर्णाली प्रदेश, कालिकोट जिल्ला, गाउँ/नगर पालिका वार्ड नं ९ मा अवस्थित यस वडा कार्यालय को सूचना पाटिमा २०७८ साल १२ गते टाँस गरिएको व्यहोरा जानकारीका लागि अनुरोध छ ।

हस्ताक्षरः
नामः ~~बिरेन्द्र धामी~~ तेजा वा. साहि
पदः वडा सचिव

कार्यालय/संस्थाको छाप

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, कालिकोट जिल्ला, शान्ती त्रिवेणी- ४ गापा/नपा ४ नं वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कालिकोट जिल्ला शान्ती त्रिवेणी गाउँ/नगर पालिका वार्ड नं ४, तिकुला मा आज २०७८ साल १२ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१)	मुना पैक्यो	इकु-३, तिकुला (जुम्ला)	कृषि	९८७३६६३७१९	मुना
२)	पदम ईडी	तिकुला	कृषी	-	पदम
३)	भुवाने बोहोरा	तिकुला	कृषी	-	भुवन

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

तराँली प्रदेश, खोल्कोट जिल्ला, रानी भेँटी गाप/नपा ९ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस खोल्कोट जिल्ला रानी भेँटी गाउँ/नगर पालिका वार्ड नं १, रेगील डाँड मा आज २०७८/१२/१४ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
	उत्तम बहादुर शाही	रेगील	व्यापार	९८४८३६८४८	
	गोविन्द प्र. ईश्वरी	रानी भेँटी	व्यापार	९८४८३०४९४	
	दिपेन्द्र शाही	"	"	९८६७३९५७३	

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना,
दरबारमार्ग, काठमाण्डौ, नेपाल ।

विषयः सूचना टाँस गरिएको सम्बन्धमा ।

उपरोक्त सम्बन्धमा त्यस कम्पनीको मिति २०७८/१०/०६ को प्राप्त पत्रानुसार कर्णाली प्रदेश, कालिकोट जिल्ला, रास्कोट गापा/नपा ६ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कर्णाली प्रदेश, कालिकोट जिल्ला, गाउँ/नगर पालिका वार्ड नं ६ मा अवस्थित यस वडा कार्यालय को सूचना पाटिमा २०७८ माघ १४ गते टाँस गरिएको व्यहोरा जानकारीका लागि अनुरोध छ ।

हस्ताक्षरः
नामः दान बी. थापा
पदः का.मा अध्यक्ष
द.थापा
कार्यवाहक वडा अध्यक्ष

कार्यालय/संस्थाको छाप

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, कालिकोट जिल्ला, रास्कोट गापा/नपा ६ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कालिकोट जिल्ला रास्कोट गाउँ/नगर पार्लिका वार्ड नं ६, पुचर्जाउ मा आज २०७८/१०/१२ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	काली बहादुर रावल	वार्ड-६	कृषि	९८४८३०६१६३	
२	दान बहादुर थापा	" - ६	बाडिबर्ष	९८४३४६०८९	
३	विरेन्द्र फर्साल	" ६	स्वास्थ्यकर्मि	९८४८२३९०५	
४	कर्ण फर्साल	" ६	कृषि	९८४८३५८३५९	
५	विर फर्साल	" ६	औलाघरी सा व अध्यन	३६४२९६८२१४	
६	आज बहादुर महाता	वार्ड नं ६	९८४८३९०५५४		

रास्कोट नगरपालिका

नगरकार्यपालिकाको कार्यालय
६ नं वडा कार्यालय स्युना कालीकोट
कर्णाली प्रदेश, नेपाल

प.सं. :०७८/७९

च.नं. ३१९ मिति २०७८/ १०/ १३

विषय : सिफारीस सम्बन्धमा ।

श्री नेपाल बिद्युत प्राधिकरण बितरण तथा ग्राहक
सेवा निर्देशनालय नेपाल बितरण प्रणाली स्तरोन्नती तथा बिस्तार आयोजना
दरवारमार्ग काठमाण्डौ ।

प्रस्तुत बिषयमा नेपाल बिद्युत प्राधिकरण बितरण तथा ग्राहक सेवा निर्देशनालय नेपाल बितरण प्रणाली स्तरोन्नती तथा बिस्तार आयोजना दरवारमार्ग काठमाण्डौ को च. न. १३७ को मिती २०७८/१०/०७ को प्राप्त प्रत्र अनुसार यस वडा नं. ६ मा आदिबासी जनजाती को बसोबास नभएको साथै सब स्टेसन निमार्ण हुने क्षेत्रमा कुनै प्रकारको चरीचरण तथा अन्यरुपले उपेयोग नगरीएको साथै उक्त योजना कार्यान्वयन मा कुनै खालको असर नपर्ने ब्याहोरा जानकारीको लागी अनुरोध गरीन्छ ।

दान बि. थापा
का.बा वडा अध्यक्ष

दान ब.थापा
कार्यवाहक वडा अध्यक्ष

भ्रष्टाचार विरुद्धको चाल, असल शासनको बहाल
Web:www.raskotmun.gov.np/E-Mail:- pchhekka@gmail.com/ito.raskotmun@gmail.com

खाँडाचक्र नगरपालिका

नगर कार्यपालिकाको कार्यालय

मान्म,कालिकोट

कर्णाली प्रदेश, नेपाल

पत्र संख्या- २०७८/०७९

चलानी नं-: ११२८

मिती-:२०७८ /१०/१०

श्री नेपाल विद्युत प्राधिकरण
वितरण तथा ग्राहक सेवा निर्देशनालय
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना ।

बिषय : जानकारी पठाईएको सम्बन्धमा ।

प्रस्तुत बिषयमा तहाँ कार्यालयको प.सं ०७८/०७९ , DSUEP NO १३२ , मिति २०७८/१०/०६ गतेको प्राप्त पत्रानुसारको व्यहोरा अवगत भई उक्त सुचनाको व्यहोरा सहितको बिवरण यस नगरपालिकाको सुचना पाटीमा टाँस गरिएको व्यहोरा जानकारीका लागि अनुरोध छ ।

२०७८/१०/१०
अबिराज शाही
प्रशासकीय अधिकृत

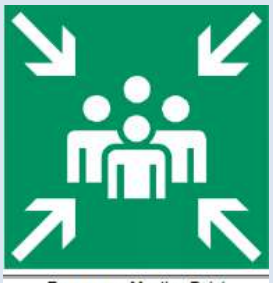
अबिराज शाही
प्रशासकीय अधिकृत

Annex 7: SAFETY RELATED SIGNS AND WASTE MANAGEMENT PRACTICES

SIGNAL NOTICE



First Aid
प्राथमिक उपचार



Emergency Meeting Point
आकस्मिक भेला हुने ठाउँ



Fire Extinguisher
अग्नी नियन्त्रण उपकरण



Fire hose
अग्नी नियन्त्रण पाइप

DANGER SIGNS



Keep Out
निर्माण क्षेत्र- टाढै रहनुहोस्



Danger
खतरा - खुल्ला खाल्डो



Danger of open trench
खतरा - खुल्ला ट्रेन्च



No operation without safety guards
सुरक्षाका साधनविना यो उपकरण संचालन गर्न निषेध

INSTRUCTION SIGNS







Slow Sign for Traffic Control
ट्रिफ्फिक नियन्त्रण



Directional Exit Sign
बाहिर जाने दिशा

SAFETY AND SAFETY INSTRUCTION SIGNS



Safety Gloves Required
सेफ्टी पन्जाको आवश्यक



Safety Vests Required
सेफ्टी भेस्टको आवश्यक



Safety Glasses Required
सेफ्टी चश्मा आवश्यक



Safety Shoes Required
सेफ्टी जुता आवश्यक


निर्माणस्थलमा गर्नहुने र नहुने कुराहरु


निर्माणस्थलमा गर्नहुने र नहुने कुराहरु

Annex 8: PHOTOGRAPHS



DL alignment at Khandachakra Municipality Ward No. 2



DL alignment at Khandachakra Municipality Ward No. 1



Tapping point (Khandachakra Municipality Ward No. 2)



Distribution line alignment along Bumiraj CF at Kota, Sanni Tribeni RM, Ward No.1



Proposed distribution line alignment along the ridge of mountain



Proposed distribution line alignment along the Road at Sanni Tribeni RM, Ward No.1



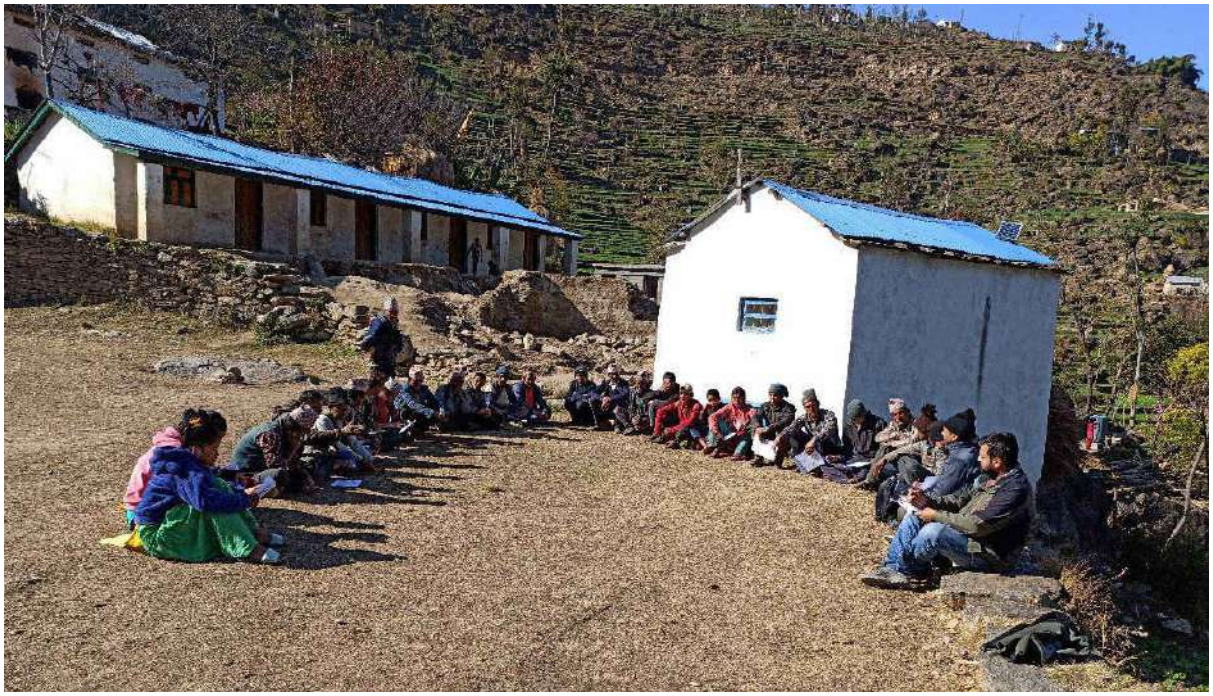
Proposed area for substation at Raskot, Raskot Municipality, Ward No. 6



Consultation Meeting at Manma, Khadachakra Municipality, Ward No.1



Consultation Meeting at Raskot, Raskot Municipality, Ward No. 6



Consultation Meeting at Tikuwa Settlement, Shani Triveni RM, Ward No. 4

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

CHHEDAGAD - BADABAN DISTRIBUTION LINE SUBPROJECT

SUBSTATION (33/11 KV) AND DISTRIBUTION LINE (33 KV)

JAJARKOT DISTRICT, KARNALI PROVINCE

NEPAL ELECTRICITY AUTHORITY

DISTRIBUTION AND CONSUMER SERVICE DIRECTORATE

DISTRIBUTION SYSTEM UPGRADE AND EXPANSION PROJECT (DSUEP)

DURBARG MARG KATHMANDU NEPAL

CONSULTANT:

NEA ENGINEERING COMPANY LIMITED, TRADE TOWER

THAPATHALI, KATHMANDU, NEPAL

JUNE 2022

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ABBREVIATIONS

ACSR	Aluminum Conductor Steel Reinforced
AIIB	Asian Infrastructure and Investment Bank
BES	Brief Environment Study
COVID-19	Corona Virus Disease
CDP	Community Development Program
CPA	Core Project Area
DCSD	Distribution and Consumer Services Directorate
DHM	Department of Hydrology and Meteorology
DL	Distribution Line
DSUEP	Distribution System Upgrade and Expansion Project
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Regulation
EMF	Electromagnetic Field
ESP	Environmental and Social Policy
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ESSs	Environmental and Social Standards
GHG	Green House Gas
GIS	Geographic Information System
GoN	Government of Nepal
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
IP	Indigenous People
IUCN	International Union for Conservation of Nature
IUSGS	International Union of Geological Sciences
LPG	Liquid Petroleum Gas
MDB	Multilateral Development Bank
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MHT	Main Himalayan Thrust

NEA	Nepal Electricity Authority
PPE	Personal protective equipment
RM	Rural Municipality
RoW	Right of Way
SPA	Surrounding Project Area
SPM	Suspended Particulate Matter
SWM	Solid Waste Management
US EPA	United States, Environment Protection Agency
USGS	United States Geological Survey
VC	vulnerable community

Unit

%	Percent/ Percentage
CO_2	Carbon dioxide
dB	Decibel
g	Gram
ha	Hectare
HHs	Households
Kg	Kilogram
Km	Kilometer
kV	Kilovolt
kWh	Kilo Watt Hour
ltr	Liter
LV	Low Voltage
m	Meter
masl	Meter Above Sea Level
mm	Millimeter
MVA	Mega Volt Ampere
MW	Megawatt
NRs.	Nepalese Rupees
^oC	Degree Centigrade
sq.m.	Square Meter

EXECUTIVE SUMMARY

Description of Project: Nepal Electricity Authority (NEA) under Ministry of Energy, Water Resources and Irrigation is responsible for the implementation of the Distribution System Upgrade and Expansion Project (DSUEP). DSUEP will enhance the distribution system to improve reliability and quality of electric supply in the Karnali province and Lumbini province. The proposed **Chhedagad - Badaban Distribution Line Subproject** is located within Shiwalaya Rural Municipality, Ward No. 1 and 9, and Chhedagad Municipality, Ward No. 12, 1, and 5 of Jajarkot District in Karnali Province. The Subproject requires 0.71 ha of land (Government Land) for the construction of substation. The 33 kV distribution line of 16.8 km passes along the right of way of the road and private land with installation of poles at the edge of the farm land. The proposed subproject is financed with loan by Asian Infrastructure Investment Bank (AIIB).

Description of Environment

Physical Environment: The Subproject (substation and distribution line alignment) area lies in hilly region. The substation lies at Latitude 28°45'23.32"N, Longitude 82°2'37.80"E and elevation of 1370 masl. The climate of the Subproject area is sub-tropical. The average temperature of the sub project area varied from 3°C to 36°C. The average annual rainfall is estimated at approximately 1110 mm per year. The air quality of the Subproject area is within the range of national ambient air quality standard while noise was found above noise quality standard because of the vehicular noise nearby the settlement area. There are no any water sources recorded within distribution line (33kV) and nearby the substation area.

Biological Environment: The proposed Subproject's substation area land is Government and managed by Haudi Kadalna Community Forest (CF) User Group. The surrounding environment of the Subproject area contains sparse vegetation with species common to the area. The floral species recorded during the screening field visit are: Sal (*Shorea robusta),* Botdhayero (*Lagerstroemia parviflora*), Chir pine (*Pinus roxburghii*), Rohini (*Mallotus philippensis*), Karam (*Haldina cardifolia*), Pipal *(Ficus religiosa),* Sanj *(Terminalia elliptica),* Simal *(Bombax ceiba),* and Khirro *(Falconeria insignis).* Similarly, wild animal recorded during the public consultation are: Barking Deer (*Muntiacus muntjak*), Marsh Rabbit (*Sylvilagus palustris*), Ghoral (*Naemorhedus goral*), Jackel (*Canis aureus*), Malayan Porcupine (*Hystrix brachyuran*), Common Leopard (*Panthera pardus*), Red Monkey (*Macaca mulatta*) and Wild boar (*Sus scrofa).* Altogether ten species of birds were noted around the surrounding project area; House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* Jureli *(Hypsipetes leucocephalus),* Rock Pigeon *(Columbia lebia),* Chyakhura (*Alectoris chukar),* Kalij (*Lophura leucomelanos)* and Eagle *(Haliaeetus leucocephalus).* All these bird species are of least concern under IUCN categorizations.

The proposed 33 kV distribution line passes through the 8 different community forests as shown in **Table 3-4**. A total of 8.97 ha of the forest area will be occupied by RoW of proposed 33 distribution line and substation area. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests and substation area are 1,778.

Socio-Economic Environment: The major ethnic compositions within the surrounding project area i.e., Ward No. 1 and 9 of Shiwalaya Rural Municipality and Ward No. 12, 1, 5 of Chhedagad Municipality of Jajarkot district are Tharu (54.6%), Kami (27.0%), Brahmin (7.1%), Chhetri (7.0%), and Thakuri (3.6%) of the total population of 12,919. The implementatio0n of the Subproject will increase the electricity beneficiaries as 5867 HHs, 30 commercial purposes and 10 industries. Khalanga, Kalimati and Chhedagad are the nearest business markets nearby the Subproject. The transportation facilities in this local level seems to be satisfactory. Tap/piped water is the main source of drinking water in the surrounding Subproject area. People of the Subproject have access with communication facilities mainly through mobile telephone services. The nearest and easily accessible health facility nearby the proposed Subproject area is Thalaha Health Post with a travel distance of 50 m from the site. The main occupation of people in the area is agro base with nearly 70% contribution followed by small trade and business/enterprises and services.

Potential Impacts and Mitigation Measures: Civil works will be involved with temporary impacts on air, noise and water quality and occupational and community health and safety; particularly related to working with electricity and in the context of the COVID-19 pandemic. Long-term impacts, although insubstantial, during operation and maintenance include occupational and community health and safety risks related to the presence of electricity infrastructure. The potential environmental issues and mitigation measures identified in screening and the preparation of ESMP report will be addressed during the compliance monitoring carried out by the safeguard team. No issues were identified in the land requirement procedure and pole erection activities. Construction of substation and erection of poles for distribution lines would not affect any private structures as the proposed substation land is unused government land, and local people have agreed & permitted to install poles at the edge of farm-lands without affecting any private structures along the distribution line. The implementation of the proposed Subproject needs 8.97 ha of forest area with estimated loss of 1,778 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. The compensatory plantation will be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019) in the ration of 1:10. The ESMP cost estimated for the Subproject is NRs 13,00,000.00 associated to mitigation measures and monitoring activities. NEA Project Implementation Unit has agreed on the estimated cost for the mitigation measures and monitoring activities.

Environmental and Social Management Plan: The ESMP serves as a guide to implement environmental and social mitigation measures and responsibility of the concerned agencies during the construction and operations of the Subprojects. Monitoring and inspection of the environmental and social activities will be carried out by Environment and Social Management Unit and Project Supervision Consultant of PIU. ESMP will be an integral part of the contractor's Bidding document which will be updated by the contactor during the sub-project construction period.

Institutional Arrangements: To ensure the full compliance to the ESMP, institutional arrangement for monitoring and reporting has been proposed. All the resources needed for the implementation of ESMP for the construction and operation phase will be provided by the PIU. Project Supervision Consultant's with Environmental and Social Safeguard Specialist will be responsible for compliance monitoring activities during the construction phase.

Environment and Social Management Unit of NEA will provide regular updates to the site offices regarding the implementation of ESMP. Contractor shall prepare an Environment, Health and Safety (EHS) plan approved by the PIU before field mobilization. Contractor should mobilize a safety officer at each work site during the construction period.

Public consultation: Public consultations have been conducted in the Subproject area. People in the Subproject area noted that electricity service is poor with frequent interruptions. People have suggested to install poles at the edge of farm-lands, and project components should not affect any house and structures along the line. The impacts on the crops while stringing of lines should be minimized. Prospective electricity consumers and people to be affected are supportive and have recommended for quick implementation of the project.

Grievance Redress Mechanism (GRM): A three-tier Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental issues at Subproject level. In each Subproject, two levels i.e., Tier-I and Tier-II of Grievance Redress Mechanism have been established. During the ESMP study period, NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the Subproject level.

Conclusion: The environmental impacts envisaged from the implementation of proposed Subproject are site specific, short term, temporary and reversible in nature. The Subproject will provide significant benefits to people and economy by providing the reliable and improve electricity supply. The implementation of the proposed Subproject needs 8.97 ha of forest area with estimated loss of 1,778 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. This ESMP is considered sufficient to mitigate the environmental and social issues identified for the Subproject and will be updated during the Subproject construction stage.

1. INTRODUCTION

1.1 Project Background

The proposed Distribution System Upgrade and Expansion Project (DSUEP) will enhance the distribution system to improve reliability and quality of electric supply in the Karnali province. The project aims improvement in voltage level and reduction in power loss which in turn will improve Nepal Electricity Authority's (NEA) financial health, improve electricity supply reliability, and reduce dependence on petroleum-fueled accessories. Government of Nepal (GoN) has envisaged DSUEP to extend the reach of 33 kV and 11 kV distribution lines "to achieve affordable electricity fulfilling the demands at the local levels for all the households by 2022". Asian Infrastructure Investment Bank (AIIB) is financing a loan to upgrade existing and build new distribution systems in Lumbini Province and Karnali Province of Nepal. This ESMP is prepared for Chhedagad-Badaban distribution line Subproject of DSUEP.

This Subproject has three major components:

Component 1: construction, extension and augmentation of distribution lines and substations, especially 33 kV lines and 33/11 kV substations.

Component 2: construction of 11 kV lines, distribution transformers, and Low Voltage (LV) lines for new power distribution facilities.

Component 3: Capacity Building, Project Implementation Support, and Technical Assistance.

1.2 Scope of Study

This study ensures that the project meets the requirements of Nepal Government's Environmental Regulations and Environmental and Social Policy (ESP) & Environmental and Social Standards (ESSs) of AIIB. This report provides the measures for environmental and social management, monitoring and reporting of the project.

1.3 Objective of ESMP

The Environment and Social Management Plan aims to sets out the measures required to maximize the benefits of the project; and to avoid, minimize and mitigate any adverse environmental and social impacts caused by the project. The objectives of this ESMP are to:

- Describe the existing natural and socio-economical resources in and surrounding Subproject area;
- Based on existing environmental conditions, identify and assess potential significant impacts during project preconstruction, construction, and operation & maintenance stages;
- Identify and recommend mitigation measures to minimize any potential impacts caused by Subproject activities;
- Identify the local concerns on environmental and social issues and address them;
- Develop environmental management plan and monitoring plan including cost;

- Recommend institutional arrangement, including capacity building to ensure proper environmental and social safeguards implementation during construction and operation phases.

1.4 Legal Provision

According to the E & S safeguard Screening report, safeguard risks/issues identified for this Subproject fall under Category III (ESMF), which triggers the preparation of ESMP to execute the Subproject. This Subproject has minimal or no adverse environmental and social impact; does not physically displace any family; and does not result in economic displacement of more than 10% of productive assets for any family.

Pertaining to Rule 3 (1), Environment Protection Act (EPA), 2019 describes completing Environmental Studies as per Schedule 1 or 2 or 3 under Environment Protection Regulation (EPR) 2020 (First Amendment in 2021/05/24 BS on Nepal Gazette), detailed environmental studies Brief Environmental Study (BES) or Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) is required. For this Subproject, pertaining to Rule 3(1), EPA (2019) describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1) under EPR (2020) state “use of forest area for the electricity distribution line project up to 66 KV”. The proposed Subproject will intercept the Haudi Kadalna Community Forest (CF), Chhare Khola CF and Nahada CF land area for the purpose of 33 kV distribution line extension and substation construction. Thus, as per EPR (2020), a BES is mandatory for the proposed sub project.

1.5 Methodology for the ESMP

The methodology that was followed while conducting the ESMP study is as follows:

i. Literature Review: Review of published literature were conducted, with priority given to publications of government institutions as well as international organizations, to collect information on project surroundings. The Municipality/Rural Municipality and its Ward profiles are used to collect the socio-economic baseline information of the Subproject. National policies, legislative frameworks and Multilateral Development Bank (MDB) policies were reviewed to understand the priorities and any legally binding requirements were studied that should be complied with while implementing the project. The Legislative provisions relevant to the project are listed in **Annex 4**.

ii. Field Survey and Investigation: Field surveys were conducted to generate information on the physical, biological and socio-economic environment of the project area. The physical environment; air quality data was monitored by Temtop Airing-1000 PM Detector, noise level by UNI-T UT 353 Mini Sound Meter (dB) and water quality by EXTECH ExStik II DO600. Field observation of the core project area and the surrounding vicinity (500m) of project footprint area was applicable for the biological assessment. A circular quadrate of radius 12.5m was used for the estimation of the number of trees presence within the RoW of the proposed distribution line. A total of 8 different sample quadrate were used and trees numbers were estimated by extrapolation within RoW. The total enumeration of the trees to be cleared for the implementation of the sub project will be estimated during the BES study. The tree

clearance approval is made once the Brief Environment Study (BES) is approved from the Ministry of Energy, Water Resources and Irrigation. Priority was given to the consultation with local communities at substation sites and the settlement areas that benefit from the project. Pertaining to Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019), BES report will be prepared. NEA/PIU must take approval from Government of Nepal, for the use of forest on the implementation phase. As per section 17 (3), the compensatory ratio for the loss of trees should be made in the ratio of 1:10 and require care, maintenance and upkeep of the planted trees before handover to concerned forest office after 5 years.

iii. Data Analysis: All potential Subproject impacts on physical, biological, socio-economic and cultural resources were integrated and assessed using best practice of Multilateral Development Banks, as well as compliance with national requirements. The Geographic Information System and SW Maps were used for the field assessment and analysis of the CPA and SPS data and presentation of the maps in the ESMP report. The project foot print Ward and Municipality/Rural municipality are considered for the collection of socio-economic and baseline information.

iv. Impact Evaluation: Significance of impacts are evaluated on the basis of reversibility, nature, magnitude, extent and duration of the impact. Identification of magnitude, extent and duration is as provided in the National EIA Guidelines, 1993 of Nepal. While evaluating the impacts and prescribing mitigation, maximum efforts were made to get expert opinion and input from the DSUEP's technical and safeguard consultant team.

v. Public Consultation: As per the Government of Nepal EPA and the AIIB Environmental and Social Policy (ESP), pre-notifications with subject of consultation, venue, and time were given at Subproject foot-print area, local level and affected Ward office in presence of concerned local stakeholders. Consultations were conducted in the Subproject area, at substations and the distribution line system settlement areas with local stakeholders.

vi. Report Format: The ESMP report is prepared as per the Environmental and Social Policy (ESP) of the AIIB, which contains an executive summary, a main report, and annexes as appropriate, including one on the nature and findings of consultations undertaken. All the comments and suggestions from the field consultation are mentioned in the ESMP report.

1.6 Classification of Impact Area

The National EIA Guidelines (GoN, 2050) has mentioned on the "Core Project Area", and "Surrounding Project Area" based on proximity and magnitude of the impacts due to construction and operation of the proposed project.

Core Project Area (CPA) refers to the temporary and permanent area for the proposed project construction and associated activities. It is area where direct impacts can be seen. For **Chhedagad-Badaban Distribution Line Subproject**, proposed substation area with

0.71 ha and the 33 kV distribution line with 16.8 km length is considered as CPA. The Subproject components are located within the Ward No. 1 and 9 of Shiwalaya Rural Municipality and Ward No. 12, 1, 5 of Chhedagad Municipality. The major settlements are Badaban, Saltara and Baluwa Bazar. The distribution line stringing route passes along the right of way of the road alignment (0+000 to 3+200, 4+700 to 5+200, and 7+700 to 8+700), cultivated land (3+200 to 4+700,7+200 to 7+700, 8+700 to 11+800), along the forest area (0+000- 2+600, 2+800- 4+600, 5+000- 5+800, 6+100- 6+400, 8+900- 10+600, 11+200- 13+200, 13+800- 15+550 and 15+600- 16+630) and along the barren land (6+200 to 7+200 and 11+800 to 16+800).

Surrounding Project Area (SPA) is the immediate vicinity of the footprint location of the proposed Subproject site. SPA is the moderate and indirect impact area. For this Subproject the 33 kV distribution line will be located within the Ward No. 1 and 9 of Shiwalaya Rural Municipality and Ward No. 12, 1, 5 of Chhedagad Municipality and along with this Wards, the adjoining Wards; Ward No. 4 of Chhedagad Municipality, Ward No. 8 of Shiwalaya RM and Ward No. 2 of Bangad Kupinde RM of Jajarkot district is considered as SPA. The impact area showing the CPA and SPA area is presented in the google map **Figure 1-1**.

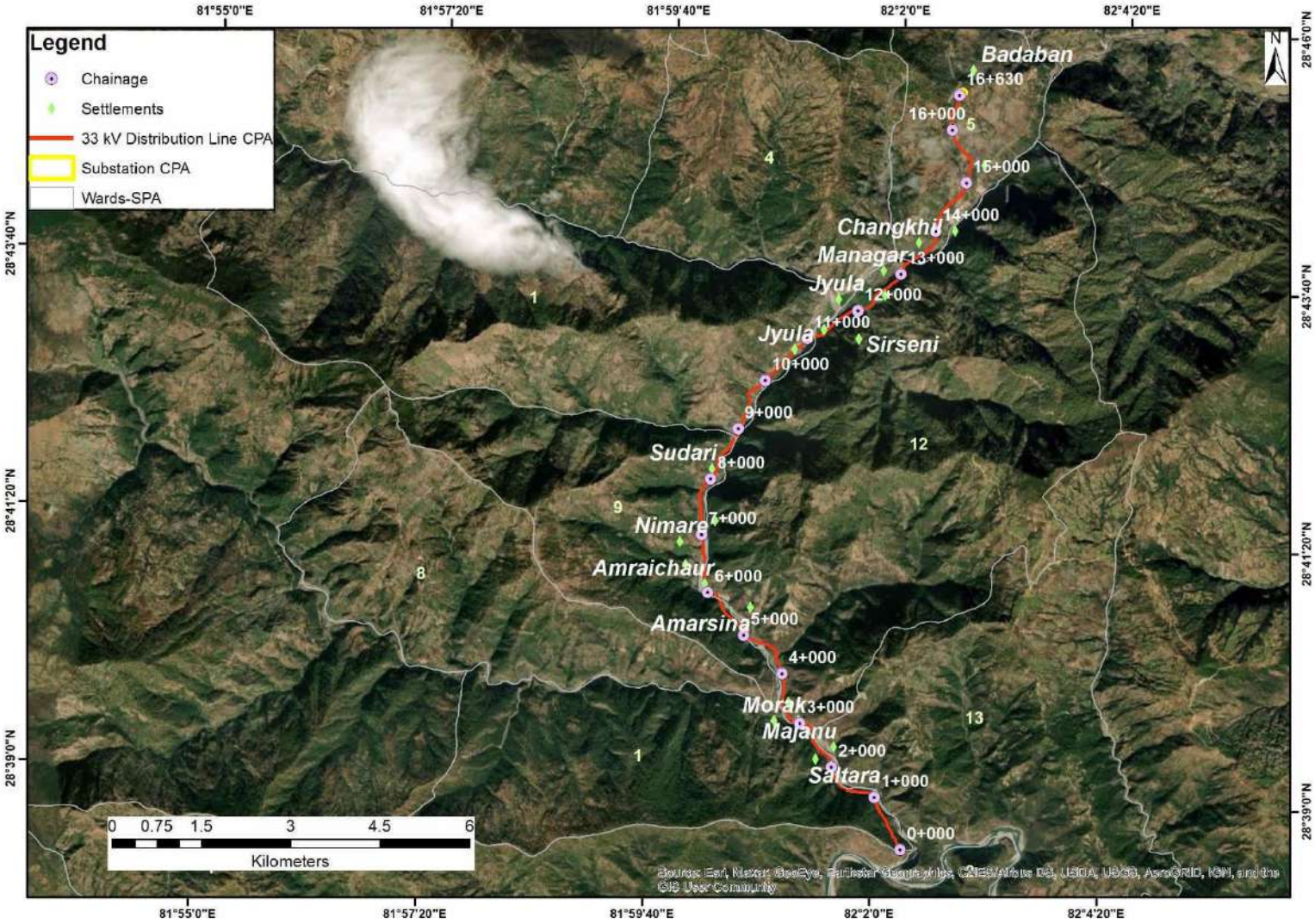


Figure 1-1: Core Project Area (CPA) and the Surrounding Project Area (SPA) Wards of the Chhedagad-Badaban DL Subproject

2. DESCRIPTION OF THE SUBPROJECT

2.1 Subproject Location and Accessibility

The proposed **Chhedagad - Badaban Distribution Line Subproject** is located within Shiwalaya Rural Municipality, Ward No. 1 and 9, and Chhedagad Municipality, Ward No. 12, 1, and 5 of Jajarkot District in Karnali Province. The tapping point of 33 kV line lies in existing 33kV DL at Shiwalaya RM- 1, Jajarkot. The proposed distribution line (33 kV) is of 16.8 km length and runs by the edge of Haudi Kadalna Community Forest and National Forest area passing along the RoW of access road. There is access to road transport within the proposed Subproject Ward area. The Subproject location and the accessibility are presented in the map below **Figure 2-1**. The main features of the Subproject are presented in **Table 2-1**.

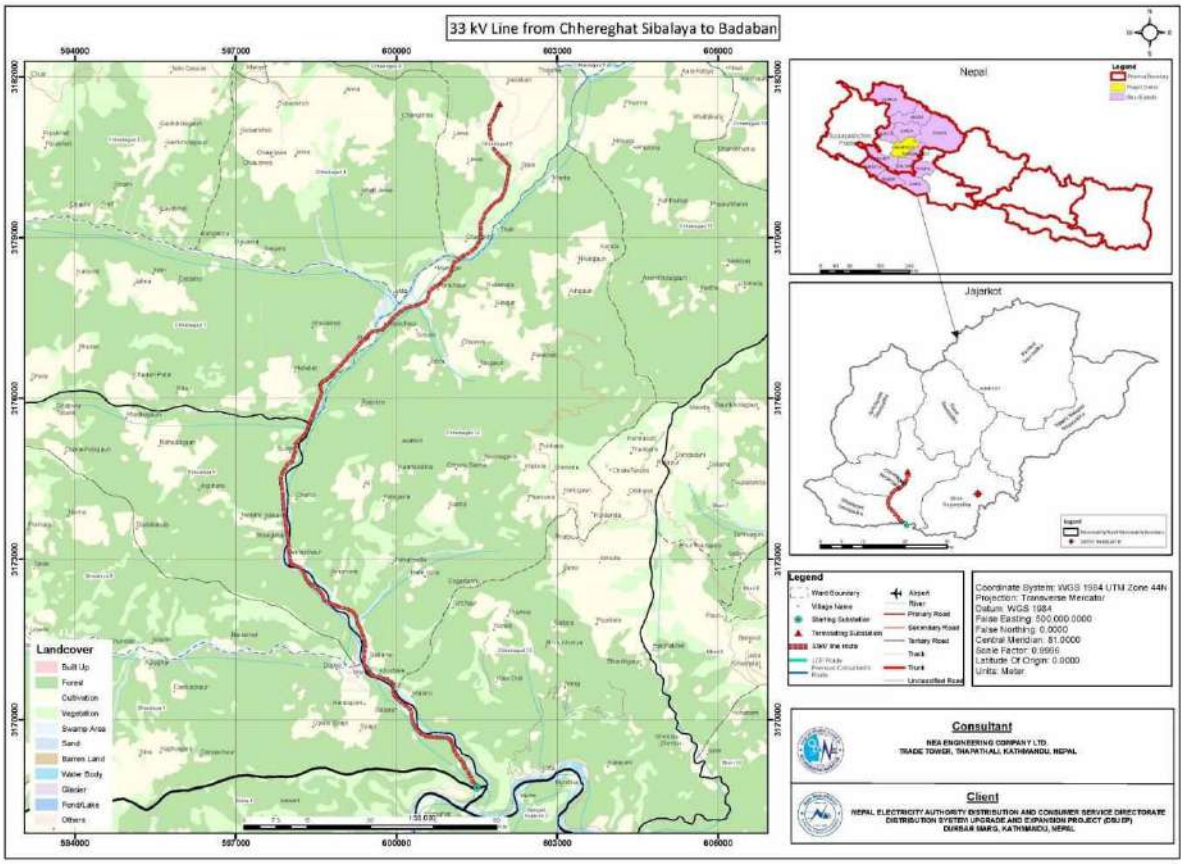


Figure 2-1: Location and Accessibility Map of Chhedagad - Badaban Subproject[1]

[1] *Source: Department of Survey, 1995 and Field Study 2021*

Table 2-1: Technical Description of the proposed Subproject

Description	Features
Proponent	Nepal Electricity Authority
Project	Distribution System Upgrade and Expansion Project (DSUEP)
Subproject	**Chhedagad - Badaban Distribution Line Project**
Funding Agency	AIIB
Project Location	Shiwalaya Rural Municipality, Ward No. 1 and 9, and Chhedagad Municipality, Ward No. 12, 1, and 5 of Jajarkot District in Karnali Province
Distribution Line	
33kV Line Starting Point	Tapped from Existing 33kV DL at Shiwalaya - 1, Jajarkot. Co-ordinate: Lat 28°38'30.29"N and Long 82° 2'18.47"E
33kV Line End Point	Badaban Substation (Proposed) at Chhedagadh - 5, Jajarkot Co-ordinate: Lat 28°45'23.32"N, Long 82° 2'37.80"E
Land type	Government/Private
System Voltage	33 kV
Max, Min System Voltage	36, 30 kV
Climatic Condition	Wind Speed: As per IS 802-1-1 Maximum Ambient Temperature: 36 ^{o}C Altitude (Min, Max): 650, 1370 masl
Length of Line/ No. of Pole	16.8 km/410 Poles
Right of way (RoW)	6 m
Number of Circuit	1
Conductor	ACSR Dog
Line Capacity/Thermal Limit (approx.)	13.4 MW at 0.9 power factor
Type	Steel Tubular Pole with 11m/13m Height
Pole Configurations	Single Pole Structures, H-Pole Structures etc. (With and without Stay Sets)
Diameter of a Single Pole (approx.)	0.22m (As per IS 2713-3)
Planting Depth of Pole	2.2m
Insulators	Porcelain Disc and Pin Insulator
Substation	
Location	Badaban Substation (Proposed) at Chhedagadh - 5, Jajarkot Co-ordinate: Lat 28°45'23.32"N, Long 82° 2'37.80"E Elevation: 1370 masl
Land type	Government
Voltage Level	33/11 kV
Substation Capacity	8 MVA
Number and Capacity of Transformer	1 nos., 6/8 MVA
Type of Transformer	3 Phase, ONAN, Mineral Oil
Type of Substation	AIS (33kV) and Indoor (11kV)
Number of 33kV Line Bays	1
Number of 33kV Transformer Bays	1
Number of 11kV Feeders	4
Substation Area	0.71 ha

2.2 Subproject Components

The major components of the Subproject are the 33/11 kV substation and 33 kV distribution line (DL). The 33 kV DL is tapped from an existing 33 kV network line and acts as a source feeding to the proposed 33/11 kV substation. 11 kV distribution feeders emerge from the substation, eventually supplying the electricity to the consumers. The structures of the Subprojects are briefly described below.

2.2.1 33 kV Distribution Line (DL)

The 33 kV DL serves as the pathway for feeding electricity to the proposed substation. Aluminum Conductor Steel Reinforced (ACSR) type conductors are stringed on Steel Tubular Pole from the starting point of the line. In general, the 33 kV lines comprises of the Steel Tubular Poles, Insulators, Conductors and Supporting Stays. Length of 33 kV distribution line is 16.8 km and the total number of steel tubular poles to be erected are estimated as 410.

Steel Tubular Poles: Steel tubular poles will be installed in this Subproject. 11 m and 13 m long poles shall be used depending upon the location of the poles and number of circuits used in the line. The poles to be erected, will be supported by stays wherever necessary. Insulators will be installed at cross arms to support the conductor from the poles.

Insulators: The insulators provide insulation to the poles from high voltage in the conductors. Pin type insulators will be employed for suspension poles whereas disc types will be employed for tension poles. Porcelain type insulators will be used owing to its dielectric strength, better compressive strength, higher resistance to degradation, suitability for extreme climate, and environment friendly characteristics over its counterparts.

Conductor: ACSR Conductor – Aluminum Conductors Steel Reinforced, conductors with stranded layers of aluminum and steel will be used for 33 kV lines. Aluminum strands carry the current whereas the steel in between provides the mechanical strength for the conductor. Typically, 100 sq. mm conductors are used in 33 kV line for this Subproject which is also known as ACSR DOG conductor.

Stay/Guy Sets: Stay Wires are used to support or provide the balancing tension to the poles. These are made up of steel materials and can be used in multiples for a single pole, depending upon the requirements.

2.2.2 Substation

The proposed substation 33/11 kV is of capacity 6/8 MVA. The substation plays the role of lowering the 33 kV voltage level to 11 kV, which will then be stringed as distribution feeder to supply the consumers. The major component of the substation is power transformer, which is supported by the switchgear components and Civil Structures. The facility and components sample pictures are shown in **Annex 3**.

Transformers: Transformer is the major component of the distribution substation. It transforms power from higher voltage to lower voltage for distribution purpose. Power

Transformers are used for the 33/11 kV substations. These transformers are mineral oil based with ONAN/ONAF (Oil Natural Air Natural/Oil Natural Air Forced) cooling mechanisms. In existing practice, the transformers used for 33/11 kV substation in Nepal are typically of 1 MVA, 3 MVA, 8 MVA and 16 MVA depending upon the load supplied by the substation. This Subproject comprises of power transformer of 6/8 MVA ONAF type.

Electrical Switchgear: Electrical Equipment comprising of Circuit Breaker, Earth Switch, Current Transformer, Potential Transformers, etc. installed in the substation are called Electric Switchgear. They facilitate the objective of power conversion.

Civil Structures: A control building is essential for the operation of the substation. It houses the operating station, along with battery systems. Guard House and Staff Quarter are other essential buildings for smooth operation of the substation.

Switchyard, Boundary, Roads, Drainage and Essentials: The outdoor civil structure in the proposed substation includes the boundary wall, main entrance gates and Switchyard. The power transformer and components of power system are laid in the switchyard based on the prudent engineering practice. Steel structures are used to support the components as per component wise requirements. Roads are paved within the boundary as essential for the transport of power transformer and other components. The substation location also serves as site store for storage of distribution system components.

2.2.3 11 kV Lines and LT Lines

11 kV lines and LT lines take the access of electricity to the consumer households. It is why the construction of those lines are always encouraged by the local people. The line route, thus the installation of poles and lines, are envisaged to go through the edge of local roads. If any line route pass through any private lands, permission from the corresponding land owner will be taken before construction of those lines start.

The detailed line route survey for 11 kV and LT lines have not been done yet. The scope of detailed survey is in the scope of the construction Contractor. The construction Contractor will conduct Pre-Construction Survey (PCS) to finalize the line route of 11 kV lines and LT lines for the construction. PCS will prepare the detailed line route of those lines and submit to PIU for approval. After the detailed line route is submitted by the Contractor and approved by PIU, E&S team of Project Supervision Consultant (PSC) will conduct an E&S study and submit the findings that

- Do the lines pose any adverse Environmental or Social issues?
- If there are any Environmental or Social issue, how can they be resolved? If the lines do not pose any adverse Environmental or Social issue, the lines will be cleared by PIU after seeking concurrence from AIIB.
- If the solution measures are not implementable in the field, PCS will suggest for any other way to divert or reroute the lines? If yes, PCS will propose alternative line route. The lines will be cleared by PIU after seeking concurrence from AIIB, given that the lines do not pose any adverse Environmental or Social issue.

2.3 Major Construction Activities in the Subproject

Activities in the Subproject area can be sub-divided into three categories viz, Pre-Construction Phase, Construction Phase and Operation Phase. For the proposed Subproject, trees and bushes in the Right of Way of 33 kV lines have to be cleared whereas, all the trees and bushes within the proposed substation boundary have to cleared for the construction work. The proposed Chhedagad-Badaban Line Subproject intercept forest area 8.97 ha. The estimated loss of trees species in the Right of Way of 33 kV lines and substation are 1778.

I. **Preconstruction phase**: The activities to be carried out before the construction phase are:
- Demarcation of land area for the proposed substation
- Receive public opinion
- Make clearance of the substation land area permanently
- Distribution line route selection
- Approval to cut down trees from the concerned government authorities

II. **Construction phase**: The activities to be carried out during the construction phase are:
- Assign the land area for temporary storage of construction materials
- Transportation of construction materials
- Leveling of land area for the proposed substation
- Cutting down of trees in Right of Way of 33 kV lines
- Construction of substation structures
- Pole erection work for 33 kV, 11 kV and low-tension distribution lines
- Stringing of 33 kV, 11 kV and low-tension distribution line

III. **Operation phase**: The activities to be carried out during the operation phase are:
- Maintenance of the substation and 33 kV distribution line route

2.4 Energy to be used

During the construction period diesel fuel will be used to power construction equipment and transport vehicles, which emits air pollutants and greenhouse gases in insignificant quantity. Use of firewood shall be restricted in the labor camp, whereas the workers shall be provided LPG for cooking.

2.5 Land Required

The **Chhedagad - Badaban Subproject** will require about 0.71 ha land for building the substation. The land is government land and will be managed by NEA to construct the substation in the designated area. The 33 kV distribution line of 16.8 km length which pass by the edge of Haudi Kadalna Community Forest and National Forest along the right of way of the road.

2.6 Material Requirement and Sources

A 33/11 kV substation, 33 kV, 11 kV and low-tension distribution lines will be constructed for this Subproject. Minimal excavation at the pole locations will be done to erect steel tubular

poles of 11 m and 13 m. The depth of burial for 11 m (approximately 256 kg) and 13 m (approximately 343 kg) poles are 1.8 m and 2.17 m respectively. The construction works for substation will not produce significant amount of spoils and thus it will not require spoil-dumping site. Similarly, excavation works carried out for digging pit holes for poles produces insignificant spoils which does not require management of earthworks.

Civil construction works will involve excavation for foundation of substation, steel reinforcement, cement, coarse aggregates and fine aggregates (sand). Materials will be procured from legally operating markets. The design team has provided the following estimate of construction materials required for 33 kV distribution line and the substation.

Table 2-2: Approximate Quantity of Material for 33 kV line

SN	Particular	Unit	Requirement
1	Amount of Steel	Ton/Km	5800
2	M15 concrete for Pole base	Cum/Km	12.5

Source: Design Report, DSUEP

Table 2-3: Approximate Quantity of Material for 33/11 kV Substation

SN	Particular	Unit	Support Structures, Road, Drainage	Control Building	Staff Quarter	Office Building	Guard House
1	M15 Concrete	cum	100	25	224	120	5
2	M25 Concrete	Cum	300	170	125	75	27
3	Reinforcement bar	Ton	7	27	20	12	4

Source: Design Report, DSUEP

2.7 Major Equipment and Power Requirements

Major equipments used during the Project implementation are:

One Excavator, One Roller, One Drilling Machine, One Crane, one Grid Supply of 100 kVA Distribution Transformer, and two 50 kVA capacity diesel generators.

2.8 Workforce Requirement

Local people in the surrounding Subproject area will be encouraged for the employment. Based on the skills (skilled, semi-skilled and unskilled labor), local people shall be used for the construction and both male and female will get equal opportunity during construction. The number of human resources required depends upon the complexity of the project as well as the geographical location of the project. In case of construction of 33 kV lines and 33/11 kV substations, the workforce typically varies from terai to hilly to mountain region. Expected number of manpower employed is enlisted hereunder.

Table 2-4: Human Resource Required for construction of 33 kV line and substation in a day of Construction

SN	Human Resource/Day	For Distribution Line	For Substation
1	Engineer (No.)	1	2
2	Supervisor (No.)	2	4
3	Foreman (No.)	3	5
4	Skilled (Lineman/Electrician) (No.)	5	7
5	Helper (No.)	3	12
6	Labour (No.)	15	20

Source: Design Report, DSUEP

2.9 Construction and Implementation Schedule

Implementation of the proposed Subproject comprises construction of a new 33/11 kV substation, 33 kV lines, 11 kV lines, low tension lines, and installation of distribution transformers. It includes construction and installation of components as mentioned in subsection 2.2. The estimated completion period is 24 Months.

Table 2-5: Construction Schedule of Project Implementation

SN	Activities/ Months	**Months** *(After the completion of Detailed Survey Study)*					
		1-3	**4-6**	**7-10**	**11-15**	**16-20**	**20-24**
1.	Invitation for tender, evaluation, and award						
2.	Implementation of Environmental and Social Safeguards						
3.	Erection of Poles						
4.	Stringing of conductor						
5.	Construction of substation						
6.	Charging and Testing						

Source: Design Report, DSUEP

3. DESCRIPTION OF THE ENVIRONMENT

3.1 Physical Environment

3.1.1 Topography and Land Use

The Subproject area lies in Ward No. 1 and 9 of Shiwalaya Rural Municipality, and Ward No. 12, 1, and 5 of Chhedagad Municipality of Jajarkot District in Karnali Province District. The proposed Subproject area is situated in hilly region The proposed distribution line (33 kV) of 16.8 km passes edge of Haudi Kadalna Community Forest and National Forest. The tapping point is situated at Latitude 28°38'30.29"N and Longitude 82° 2'18.47"E with an elevation of 700 masl (**Figure 3-1**). The proposed 33 kV distribution line stringing route passes along the road portion, private farm lands parallel to the Chhedagad Khola, which is one of the tributaries of Bheri River from the base of Mahabharat Range.

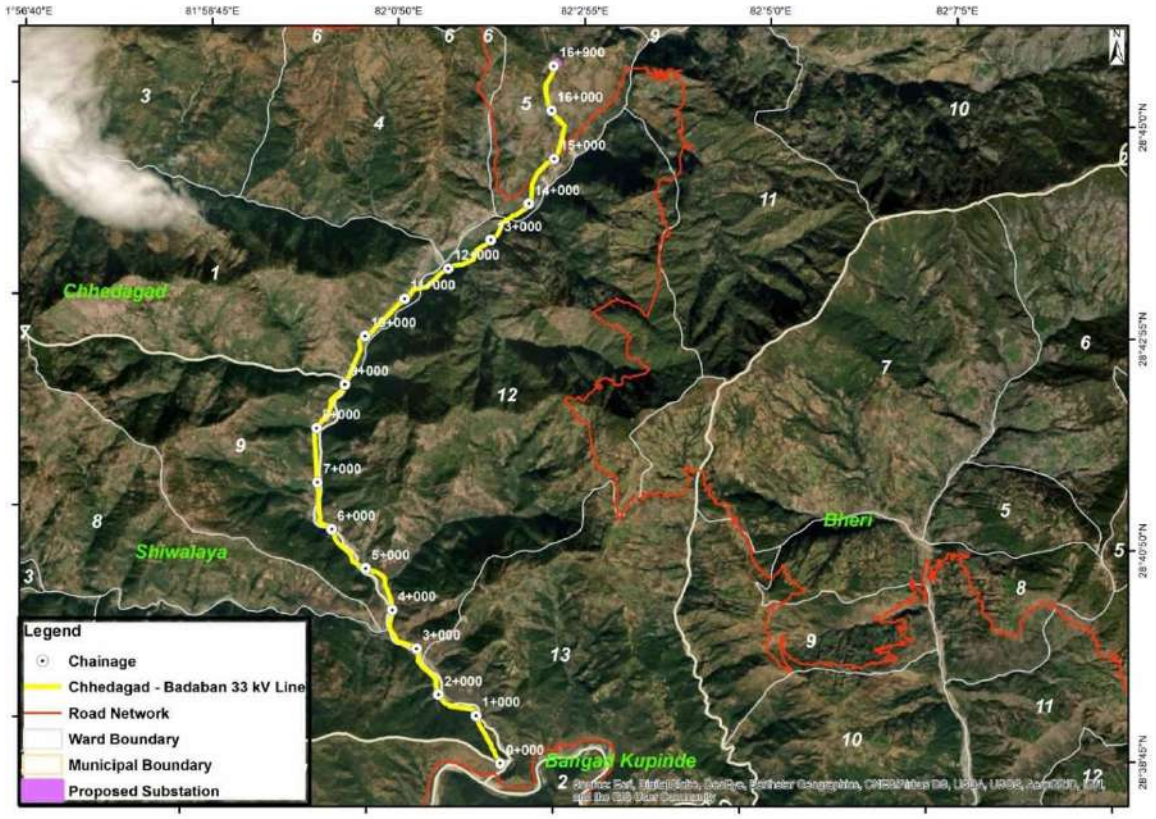


Figure 3-1: Location map and Land use details of the Subproject[2]

The substation lies at Latitude 28°45'23.32"N, Longitude 82° 2'37.80"E and elevation of 1370 masl (**Figure 3-3)**. The site is primarily within the flat land. It lies in open and clear barren land owned by GoN and managed by Haudi Kadalna Community Forest User Group. The proposed substation boundary lies within 0.71 ha area. None of the private and public entities will be affected due to the implementation of the distribution line system, as it will be installed within the RoW of existing road and the edges of the private farm land. The land use map details with the components of the Subprojects are presented in **Annex 2**.

[2] *Source: Topographic Map, Department of Survey, 1995 and Field Study 2021*



Figure 3-2: Tapping point near Chhedaghat bazar



Figure 3-3: Chhedagad - Badaban Substation View

3.1.2 Geology

The distribution line runs from the tap point through the road portion, agriculture land of silty clay, community forest and newly cut road. Due to a landslide and poor rock mass at the Jyula, the alignment has been shifted and the align. At various points along the river deposit, the line crosses the Chheda Riverment now passes from the left bank of the Chhedakhola of cultivation land of cohesive soil. No major geological hazard has been identified associated with the proposed Subproject.

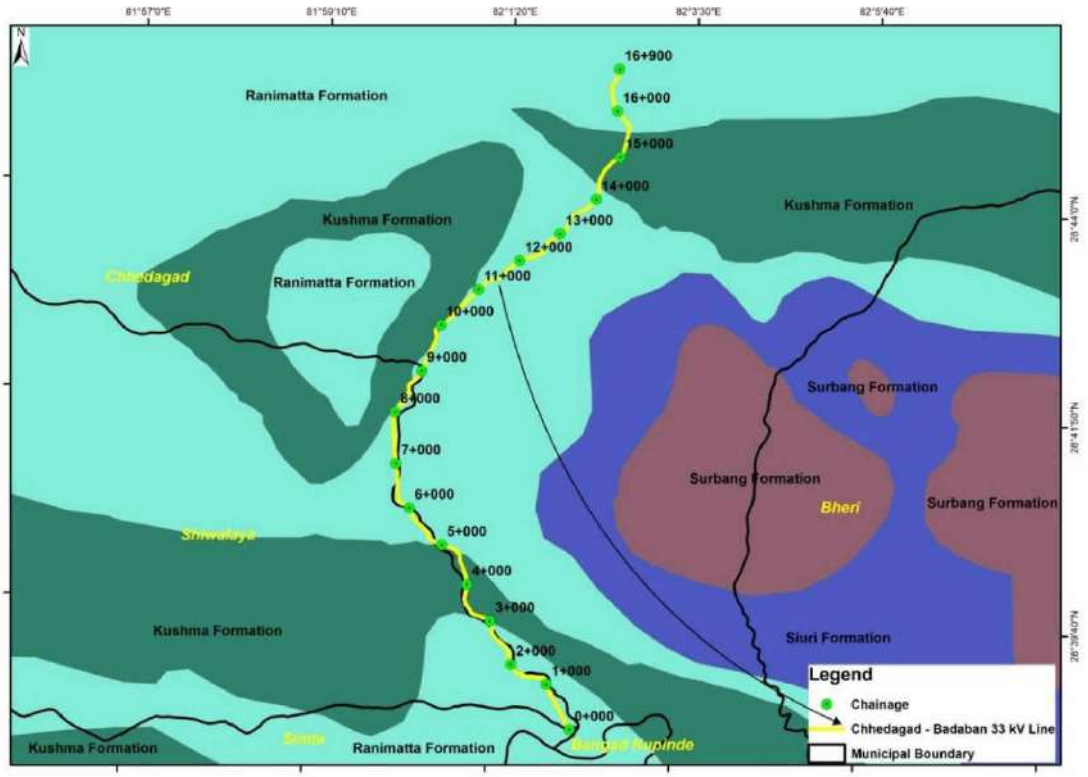


Figure 3-4: Geological Map of proposed Subproject Area[3]

[3] *Source: Department of Mines and Geology (DMG), 2020*

3.1.3 Seismology

The entire country of Nepal is in a seismically active zone caused by subduction of Indian tectonic plate under the Tibetan Plate. According to National Seismological Center of Nepal several big earthquakes have been felt in Nepal, the earthquakes of magnitude 6 to 7 are mostly confined to the Main Himalayan Thrust (MHT) between the foot hills and the Higher Himalaya. Moreover, earthquake generation is confined to the crustal depth of 20 km. However, shallow earthquakes at depths down to 6 km are generated as a result of strike slip faults. Therefore, the substations and distribution lines of this Subproject will be designed and operated in accordance with seismic design requirements and best engineering practice. The seismic activity in Nepal between 1964 and 2019 as in IUSGS portal is shown in **Figure 3-5.**

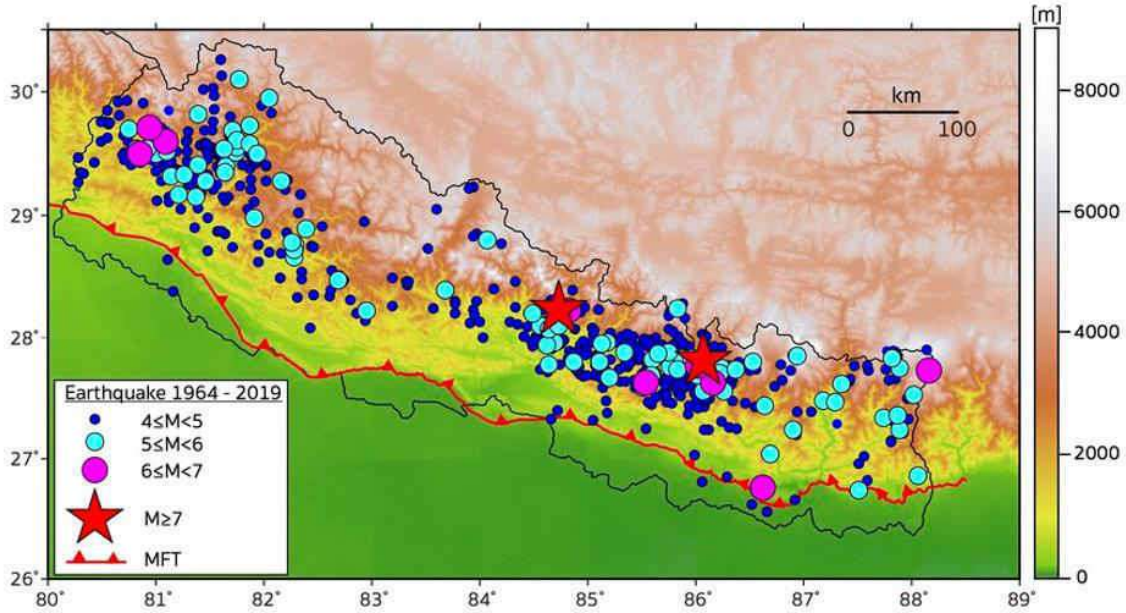


Figure 3-5: Seismicity map of Nepal from 1964 -2019[4]

3.1.4 Climate

The climate of the Subproject area is sub-tropical. According to DHM 2021, the average temperature of the sub project area varied from 3°C to 36°C. The relative humidity is in the range of 84% to 87 %. The average annual rainfall is estimated at approximately 1110 mm per year. Almost 80% of rainfall occurs during monsoon (June to September).

3.1.5 Air, Noise, Water Quality and Polluting Sources

The major air polluting sources recorded are only from vehicular emission and dust problem from plying of vehicles and high wind velocity. Noise polluting sources noted at the time of field study are similar to the air polluting sources. Unnecessary honking along the access road of site is the source of noise generation. Following table shows the real-time quality of air and noise during field study.

[4] *Source: USGS catalogue, 2019*

Table 3-1: Ambient Air and Noise Quality within the Proposed Subproject Site

SN	Location/ Chainage	**Air Quality**[5]**-**Temtop Airing-1000 PM Detector (µg/m^3)					**Noise Level -**UNI-T UT 353 Mini Sound Meter (dB)		
		$PM_{2.5}$	**Level**	**PM_{10}**	**Level**	**Average Time of Measurement**	**Measured**	**Ref.**[6]	**Area**
1.	Tapping Point	25.4	100	33.6	200	1-hour	35.5	50	Residential Area
2.	Substation	23.4		27.5			39.4		

Source: Field Visit, 2022

The air quality of the SPA was found within the range of national ambient air quality standard while noise was found above noise quality standard because of the vehicular noise nearby the settlement area.

There are no any water sources recorded within and nearby the substation area instead Bheri river lies about 700m far from tapping point of 33 kV line which is seasonal and 33 kV distribution line route about 10 km will pass parallel to Chhedagad Khola. The physical parameter of the Chhedagad Khola was tested nearby tapping point.

Table 3-2: Water Quality of Stream along the Distribution Line Route

S N	**DL/ SS**	**Location**	**Stream Name**	**Flood plain width** (m)	**DL distance from Stream**	**Parameter-** *EXTECH ExStik II DO600*					
						Temp. (^oC)	***Ref*[7]*.***	***pH***	***Ref.***	***EC (µc/cm)***	***Ref.***
1.	DL	Thalaha Bazar, Shiwalaya RM-08	Bheri river	180	30m	25.4	<40^{o}C	7.21	5.5-9.0	115	1500

Source: Field Visit, 2022

The water quality of the Chhedagad Khola (stream) was found to be within the limit of acceptance for the aquatic life in the stream. The water parameter data is compared with Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem. The construction activities of the Subproject components will not have impact to the local stream.

[5] *National Indoor Air Quality Standard, 2009*

[6] *National Ambient Sound Quality Standard, 2012*

[7] *Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem, 2019*

3.1.6 Solid Waste Management

The wastes were found littered in front of HHs and along the side of the access road near Subproject areas. People of the nearby area were found managing organic wastes within the household premises. Recyclable wastes (large quantity) were sold to scrap collector occasionally. The estimated quantity of solid waste generation from the labor camp is shown in **Table 3-3**.

Table 3-3: Estimated Daily Solid Waste Generation from Campsite

SN	Description	Calculation	Remarks
1.	Total Labors within the Campsite	= 20 Labors	
2.	Total Waste Generation to be Expected	= 20 * 123.62 g/capita/day = 2472.4 g/capita/day = 2.4724 kg/day	
3.	Organic Waste Composition Responsible for Foul Smell, and Rodents	= 1.26 kg/day	Assuming 51% organic waste
Rest other waste is recyclable, and non-decomposable which could be stored for long period and have less impact on the environment if properly managed. The amount of organic waste is manageable within the Subproject site as organic waste per day will be expected to be only 1.26 kg/day.			

3.2 Biological Environment

The proposed Subproject's substation area land is Government and managed by Haudi Kadalna Community Forest (CF) User Group. The proposed 33 kV distribution line passes from the edge of Chhare Khola CF, Chore Khet CF, Nahada CF, Chame Patal CF, Kotila CF, Neepane Hariyali CF, Ogle Umra Pakha CF, Haudi Kadalna CF and and Haudi Kadalna CF. The proposed Subproject lies within the elevation below and above 1000 (650-1370) masl of Jajarkot District and thus is located in tropical and sub-tropical bioclimatic zone. The proposed Subproject development site does not lie within any protected area and conservation area.

The floral species recorded during the screening field visit are: Sal (*Shorea robusta),* Botdhayero (*Lagerstroemia parviflora*), Chir pine (*Pinus roxburghii*), Rohini (*Mallotus philippensis*), Karam (*Haldina cardifolia*), Pipal *(Ficus religiosa),* Sanj *(Terminalia elliptica),* Simal *(Bombax ceiba),* and Khirro *(Falconeria insignis).* Similarly, wild animal recorded during the public consultation are: Barking Deer (*Muntiacus muntjak*), Marsh Rabbit (*Sylvilagus palustris*), Ghoral (*Naemorhedus goral*), Jackel (*Canis aureus*), Malayan Porcupine (*Hystrix brachyuran*), Common Leopard (*Panthera pardus*), Red Monkey (*Macaca mulatta*) and Wild boar (*Sus scrofa).* Altogether ten species of birds were noted around the surrounding project area; House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* Jureli *(Hypsipetes leucocephalus),* Rock Pigeon *(Columbia lebia),* Chyakhura (*Alectoris chukar),* Kalij (*Lophura leucomelanos)* and Eagle *(Haliaeetus leucocephalus).* All these bird species are of least concern under IUCN categorization.

The proposed 33 kV distribution line passes through the 8 different community forests as shown in **Table 3-4**. A total of 8.97 ha of the forest area will be occupied by RoW of proposed 33 distribution line and substation area. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests and substation area are 1778.

Table 3-4: The community forest along the proposed 33 kV distribution line

SN	Name of CF	Chainage	District	Municipality/RM	Ward
1	Chahare khola	0+000- 2+600	Jajarkot	Shiwalaya RM	1
2	Chore khet	2+800- 4+600	Jajarkot	Chhedagad Municipality	12
3	Naahada	5+000- 5+800	Jajarkot	Shiwalaya RM	9
4	Chame Patal	6+100- 6+400	Jajarkot	Chhedagad Municipality	12
5	Kotila	8+900- 10+600	Jajarkot	Shiwalaya RM	1
6	Neepane Hariyali	11+200- 13+200	Jajarkot	Chhedagad Municipality	12
7	Ogle Umra Pakha	13+800- 15+550	Jajarkot	Chhedagad Municipality	5
8	Haudi Kadalna	15+600- 16+630	Jajarkot	Chhedagad Municipality	5

Source: Field Visit, 2022

3.3 Socio-economic Environment

Demography and Ethnic Compositions: The proposed Subproject area lies in Ward No. 1 and 9 of Shiwalaya Rural Municipality and Ward No. 12, 1, 5 of Chhedagad Municipality of Jajarkot district. Khalanga, Kalimati and Chhedagad are the nearest business markets nearby the Subproject area. The general demographic information of the affected Municipality and RM is presented in **Table 3-5**. The major ethnic compositions within the surrounding project area i.e., Ward No. 1 and 9 of Shiwalaya Rural Municipality and Ward No. 12, 1, 5 of Chhedagad Municipality are Tharu (54.6%), Kami (27.0%), Brahmin (7.1%), Chhetri (7.0%), and Thakuri (3.6%) of the total population of 12,919. Majority of people follow the Hindu religion and rest follow Buddhism and Christian religions. The Core Project Area (CPA) of the Subproject will not affect any indigenous people.

Table 3-5: General Demographic Characteristic of Subproject Municipality

S.N.	Local Level	Ward No	HH	Population		
				Male	Female	Total
1	Shiwalaya RM	1	343	1146	1080	2226
2		9	254	710	746	1456
3	Chhedaghad Mun.	12	620	1673	1734	3407
4		1	556	1587	1713	3300
5		5	469	1264	1266	2530
Total			**2242**	**6380**	**6539**	**12919**

Source: (CBS, Rural Municipality-Municipality Profile of Jajarkot District, 2018)

Road Accessibility: The Subproject's tapping point is connected to Chhinchu - Jajarkot – Dunai Road Section. The proposed distribution line meets at the Puspalal Lokmarg (Midhill) Road (Thalaha-Badaban Section), 1.5 km before proposed substations. The transportation facilities in this local level seems to be satisfactory.

Electricity Beneficiaries: The implementatio0n of the Subproject will increase the electricity beneficiaries to 5867 HHs, 30 commercial purposes and 10 industries. This will expand the electricity supply in the Subproject area with clean energy sources.

Water and Sanitation: Tap/piped water is the main source of drinking water in the surrounding Subproject area. About 59.3% of the households in the proposed Subproject's area have access to tap/piped water. Almost all the houses in the area have some sort of toilet facility.

Health Facility: The nearest and easily accessible health facility nearby the proposed Subproject area is Thalaha Health Post at a distance of 50 m from the site.

Occupation: Agriculture is the main occupation of people in the Subproject area with nearly 70% contribution; small trade and business/enterprises and services are other occupation of people in the Subproject area. Intermittent tripping and voltage drop of electricity was adversely affecting irrigation of crops and daily household chores activities.

Communication: People of the Subproject have access to communication facilities mainly through mobile telephone services. In the Subproject area, people have access to local and national FM Radio networks and local newspaper facility.

COVID-19: The coronavirus (COVID-19) pandemic has been defined as global health crisis; the virus has spread in almost all parts of Nepal. Heedful of its vulnerabilities, the Government of Nepal had enforced a nationwide lockdown in 2020/2021 and activated its federal, provincial and local level mechanisms to respond to the crisis. In case of any sudden surge or outbreak of COVID-19, quarantine facilities and immediate health support should be provided to the workers and personnel involved in construction.
Other seasonal and minor diseases like dengue, fever, sneezing, cough, gastritis, diabetes and mental disorder have been reported within the Subproject area.

4. ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

The environmental and social impacts predicted during the construction of proposed Subproject are discussed in this chapter. National Environmental Impact Assessment Guidelines (GoN, 2050) has been referred for the predicting of magnitude, extent, and duration of the project-induced environmental impacts in Subproject area. This chapter identifies the basic environmental and social impacts in the Subproject area that will arise during the construction. The detailed impacts of each domain of environmental and social safeguards have been addressed in this chapter.

4.1 Anticipated Beneficial Impacts

Construction Phase

4.1.1 Local Employment

Local employment will be created during the construction phase. As mentioned in section 2.8 Workforce Requirement, the typical construction team will have 21 skilled manpower and 58 unskilled manpower for the period 10-12 months for the erection of poles and stringing the distribution lines and 16-18 months of time for building the substation. The local people within the SPA and OPA will be encouraged for employment during construction phase. Both male and female will get equal opportunity during construction. Based on the skill levels (skilled, semi-skilled and unskilled labor) local people will be used for the construction as far as possible. *The magnitude of impact is considered moderate, the extent is local, and the duration is short-term.*

Operation Phase

4.1.2 Local Economy and Enhancement in Rural Electrification

The local economy will benefit through improved reliability of electricity supply, which is a necessary condition for economic growth. Different industries within/nearby the proposed Subproject area will be established. Intermittent tripping and voltage drop problem nearby the settlement areas will be reduced. Upgrading and expansion of electricity distribution helps to way-out many electricity related issues and promotes the use of new types of home appliances, use of electric motors for irrigation, and establishment of small and large industries. *The magnitude of impact is considered high, the extent is local, and the duration is long-term.*

4.1.3 Greenhouse Gas Emission Balance

Net Green House Gas (GHG) emissions resulting from the Subproject area are expected to be low as the distribution lines will improve and expand electricity supply from clean energy sources. It will reduce the emission of GHG from the traditional source like Guitha (made from cow dung), firewood and timber along with commercial fuel Kerosene for cooking/lighting, heating and diesel for water pumping. *The magnitude of impact is high, the extent is local, and the duration is long term.*

4.2 Anticipated Adverse Impacts

A. Physical Environment

Construction Phase

4.2.1 Change in Land Use

The Subproject requires about 0.71 ha land for the substation. The proposed substation land area belongs to Haudi Kadalna Community Forest User Group, i.e., government land. The land will be managed by NEA and will be converted to the substation area surrounded by proper boundary wall. Distribution Line passes parallel to the Chhedagad Khola, which is one of the tributaries of Bheri River. The construction of the Subproject will bring change in the land use permanently. Potential impacts caused by distribution lines will be limited to approximately 0.22 m of land for each pole, at the edge of roads and cultivated lands. *The impacts due to use of land will be moderate in magnitude, site specific and long term in duration.*

Mitigation Measures

- Steel Tubular Pole for distribution lines will be planted at the right way of existing road without hampering traffic movement. In case of cultivated land, minimal land will be used at the edge for planting the poles.
- Cropping calendar will be followed while planting poles and stringing of conductors so that standing crops will not be damaged.
- In case of loss of standing crops, compensation will be made to the respective land owner as per the prevailing market rate.

4.2.2 Erosion and Landslide

The proposed Subproject area distribution line is nearby the Chhedagad Khola and is susceptible to high erosion and landslide from during rainy season. The distribution line length is 16.8 km and about 10.5 km length passes nearby and parallel to the Chhedagad Khola, adjoining edge of private land untill the start of Jyula Bazzar area. Then, it will pass through RoW of some sections of Mid-hill Highway Road and follow local feeder road up to the proposed substation at Badaban. Possible landslide and erosion may result nearby the distribution lines alignments. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long-term.*

Mitigation Measures

- Concrete foundation is recommended for Steel tubular pole installation for 33 kv lines.
- Pit hole prepared for the installation of steel tubular pole shall not be left open as possibility of accident may arise.
- Protection work along the eroded section of the Chhedagad Khola at 10.5 km of the distribution line stretch.
- The client need to coordinate with local level governments and request the local government to give priority for the embankment activities for the protection of cultivated land and proposed 33 kV distribution lines.

4.2.3 Air Quality

The impact on air quality during the construction period is expected to be insignificant, as site clearance, excavation, stockpiling of construction materials, waste burning at camp

sites and equipment installation are localized and of short term. Transportation of the materials and movement of construction crew and equipment will have minor impact on air quality. *The impact on air quality will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors' vehicles and equipment should meet Nepali vehicle emissions standards.
- Dust emissions shall will be controlled using water sprays on earthen roads nearby settlements in substation area.
- Open burning of wastes should be strictly prohibited.
- Construction workers should use face masks at all times.
- All dust generating loads carried in open trucks should be covered.

4.2.4 Noise

Noise is inevitable during construction. As noted in section 3.1.5, noise is less around the substation area as the area is rural and settlement is sparse. Construction-related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites; construction related noise is not expected to exceed acceptable levels. *The impact on noise level will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors will be required to monitor noise during the construction.
- For substation site, boundary walls serve as noise barrier, and it should be constructed as early as possible.

4.2.5 Drainage and Water Quality

Substation sites of 0.71 ha. will result in slight alteration of drainage patterns, although the alterations in drainage will not be quantifiable. Interference with drainage patterns will be temporary during construction phase only. The impact on water quality during the construction period is expected to be insignificant. Water will be used primarily as a cement additive for construction of substation foundations and boundary walls, and to control dust. *The magnitude of impact is considered low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Storm water run-off from substation sites will be minimized and controlled with bunding temporary dikes (constructed boundary walls will also help contain run-off water).
- Proper management of ground drainage from camps as a preventive measure against breeding places of mosquitoes, and other pests.

4.2.6 Soil and Muck

As the proposed substation land's ground level is low, filling of soil is necessary. The required filling materials shall be purchased from nearby authorized crusher plant approved by local government. For distribution lines the excavation activity will be insignificant. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Soil required for filling shall be purchased from the nearby authorized crusher plant under local government.
- Soil shall be covered with tarpaulin while transporting it from earth-borrowing areas.
- Simultaneous water sprinkling and compaction of spoil shall be done using the roller.

4.2.7 Solid Wastes

The wastes generated during construction within the Subproject area are cement bags, iron bars, and other leftover construction materials, and waste generated by the labor camp. It might cause adverse impact if not properly managed. Organic wastes generated from labor camp may give foul smell and attract rodents if not manage properly. Inorganic wastes generated during implementation shall be managed through source segregation. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Source segregation of organic and inorganic wastes in different storage areas or facilities in the designated location.
- The organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit and covered by thick layer of soil on daily basis.
- Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix shall be used as refills for ground leveling.
- Packing materials used for casing components should be recyclable.
- Recyclable wastes like left out/non-usable reinforcement bars and packing materials shall be sent or sold to scrap vendors.
- Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container and sealed carefully.
- Effective coordination shall be done with local level government for proper waste management during construction period.

Operation Phase

4.2.8 Electric and Fire Hazard

Employees performing servicing or maintenance of substations may be exposed to electric shock, burns and injuries from the unexpected energization or release of stored energy in the equipment. *The magnitude of impact is considered moderate, the extent is site-specific, and the duration is long term.*

Mitigation Measures

For this, the following mitigation measures will be practiced:

- Use of insulation, guarding, grounding, electrical protective devices, and safe work practices is advised.
- Boundary walls and security fences around substation are recommended to prevent unauthorized access.
- Only trained and authorized personnel shall be allowed for electrical works.

- Warning signs shall be installed.

B. Biological Environment

The proposed Subproject avoids forest area and other sensitive biodiversity area. Hence, there will be no significant impact to biological environment because of construction of substation and distribution lines.

Construction Phase

4.2.9 Loss of Habitat

As the proposed substation area is a barren land, whereas the 33 kV distribution line passes through the edges of road alignments, farm lands and forest areas. The total area of the forest area that will be occupied within RoW of the proposed 33 kV distribution line and substation area is 8.97 ha. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests and substation area are 1,778. The possible use of firewood should be restricted during the construction activities. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long term.*

Table 4-1: Detail of impacted forest area and trees loss

Area (ha)			Name of species	No. of trees	
33kV line	Substation	Total		33kV line	Substation
8.26	0.71	8.97	*Shorea robusta*	811	-
			Terminalia elliptica	88	-
			Lagerstroemia parviflora	147	-
			Haldina cordifolia	147	-
			Mallotus philippensis	177	-
			Ficus religiosa	15	-
			Mangifera indica	29	-
			Bombax cibea	15	-
			Falconeria insignis	44	-
			Pinus roxburghii	280	22
			Berberis aristata	-	1
			Total	**1755**	**23**

Mitigation Measures

- Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019).
- Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.
- Workers and staffs should be restricted to use firewood for cooking.
- Providing LPG based stoves in Labor camp.
- Labors and staff shall be made aware to avoid illegal activities in adjoining forest.

Operation Phase

4.2.10 Bird electrocution and collision

The Subproject area is in rural setting area and there is no presence of critical habitat of avian fauna. Electrocution is a risk to bird species that perch on power line infrastructures (substations and distribution lines). List of birds presented in section 3.2 may collide to distribution lines and substation. Minimizing bird collision and electrocution risk is therefore a win-win for biodiversity and the power sector. *The magnitude of impact is low, the extent is site-specific, and the duration is long term.*

Mitigation Measures

- Bird guards shall be installed above the poles and white spirals in the conductors to improve visibility electrical structures.

C. Socio-Economic and Cultural Environment

The anticipated impacts regarding the socio-economic and cultural environment associated with Subproject are discussed below:

Construction Phase

4.2.11 Land Requirement

The land required for the proposed substation area is 0.71 ha, is the government land used by Haudi Kadalna Community Forest and National Forest, that will be managed by NEA later. This has been confirmed officially through Community Forest User Group and Ward Office, Shiwalaya RM. NEA is given the right to use the land to build and operate a substation. The construction activities of the Subproject will not involve any private land. So, there will be no land acquisition, and thus no resettlement impacts. For the construction of distribution lines, owners of private land along the route have assured and committed for necessary help and support during implementation. They have agreed on NEA's proposal that poles shall be installed on the edge of cultivated lands and appropriate compensation for the loss of crops shall be given (**Annex 5**). Compensation shall be made on the basis of crops types and quantity of loss equivalent to the market price. *The impacts will be low in magnitude, site specific and long term in duration.*

Mitigation Measures

- Distribution pole of diameter 0.22 m should be installed on the edge of cultivated land making no loss of standing crops.
- If there is loss of crops, appropriate compensation shall be made.

4.2.12 Public Health

Construction activities will be of small scale, causing no significant adverse impact to existing quality of air, water and sound. Local people except the workers do not involve in construction activities. Considering COVID-19 pandemic as an example, workers will be

advised to avoid unnecessary contact with local people. *The magnitude of impact is low, the extent is site-specific, and the duration is short term.*

Mitigation Measures

- Contractors shall implement health and safety plans.
- Awareness on HIV/AIDS and other sexually transmitted disease should be provided to the labors.
- Awareness on basic sanitation and waste management should be provided to the labors.

4.2.13 Occupational Hazards and Safety of Workers

Occupational health hazard and safety of workers is the major issue during the construction period. Working without adopting safety measures during excavation work, spoil management work, mechanical and electrical equipment handling activities, chemical handling, etc. during construction may call the risk of accident. Primary victims are the workers involved in the construction. *So, the envisaged direct impact is high in magnitude, site specific in extent, short term in duration.*

Mitigation Measures

- Contractor shall prepare the Environmental, Health and Safety plan and take approval from the Client (NEA/PIU). Contractor shall employ Safety officer during construction period.
- Contractor shall prepare the Environmental, Health and Safety plan and take approval from the Client. Safety officer should be employed during construction period
- All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. The Contractor will adhere to labor Act 2074 and Labor Rules 2075.
- The basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid are required for the campsite.
- All the workers shall have health insurance over the period of construction.
- Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs) as shown in **Annex 7**.
- NEA will be responsible to supervise the EHS performance of the construction Contractor, and worker's health and safety.

4.2.14 Child Labor, and Gender Issues

During the construction period, people employed on daily wages for excavation, transportation of construction materials, and other construction-related works should avoid the involvement children and should avoid gender discrimination. Gender discrimination may occur as the Contractor may not be sensitive towards gender equity. Contractors should equally pay men and women workers. Construction area should be gender friendly with required facilities. *The envisaged impact is high in magnitude, site-specific in extent, and short-term in duration.*

Mitigation Measures

The Subproject will ensure to:

- Provide equal wage to male and female for similar nature of work.

- Restrict use of child labor i.e., below 16 years of age (which is as per government and ILO guidelines).
- Provide female friendly construction environment with separate cabins and toilet for women in the camp.
- Prepare suitable work categorization for women.

4.2.15 Socially Undesirable Activities

The workers may use alcohol and other forms of intoxication, gamble and quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities in and around the project area. *So, the envisaged impact is low in magnitude, local in extent, and short-term in duration.*

Mitigation Measures.

- Restrict movement of workers out of camp after dinner time in the night.
- Prohibit the use of alcohol and gambling in the camp.
- Supply water supply, daily consumable items, communication facility in the camp so as not to create additional pressure on the local services.
- Orient workers to show respect to local tradition and culture.
- Prepare a code of conduct for all project staff, orient them and monitor that these are effectively followed by all.
- Assign a public relation officer to keep close and regular consultation and coordination with local communities.
- Regular monitoring of workers' behavior and take appropriate measure on rule violators.

Operation Phase

4.2.1 Hazards and Safety

Occupational health hazard and safety of staffs is the major issues during the operation phase of the substation. The possible electric shock and fire hazard might cause injury or death to working staffs thus the protection measures should be taken all the time. *The envisaged direct impact is high in magnitude, site specific in extent, long term in duration.*

Mitigation Measures

- There will be the use of insulation, guarding, grounding, electrical protective devices, and safe work practices.
- Boundary walls and / or security fences around substations to prevent unauthorized access.
- Only trained and authorized personnel will be allowed for the electrical works.
- No electric wire shall be stringed above the house.
- Security fences around the substation.
- Establishment of warning signs
- Shutdown shall be taken during work on DL route

4.2.2 Electric and Magnetic Field Effect

Electric power distribution lines create electric and magnetic field together, referred to as electromagnetic fields (EMF). Electrical flux density declines in inverse proportion to the square of the distance and magnetic fields decline in inverse proportion to the cube of the distance; so, there will be no impact outside of the substation boundaries. [8] Research on the long-term effects of EMF associated with distribution lines is inconclusive with respect to health risks. As noted in the World Bank EHS guidelines for transmission and distribution systems, there is no empirical data demonstrating adverse health effects from exposure to typical EMF levels from power transmissions lines and equipment.

[8] E.g., at a distance of 10 meters from a single distribution line or conductor, electrical flux density drops to 1% of the field strength at a distance of 1 meter from the conductor: 1/ (10*10) = 1%. Likewise, the magnetic field drops to 0.1% of the field strength at the conductor: 1/ (10*10*10) = 0.1%.

5. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

5.1 Methodology in Information Disclosure, Consultation and Participation

The following methodologies were followed for information disclosure, consultation and participation:

i. Identification of the stakeholder is important to understand how the Subproject activities will engage with different institution/groups/individuals. The stakeholders are the groups that might be affected by the Subproject or might influence Subproject outcomes. The identified stakeholders are considered in three groups (**Figure 5-1**).

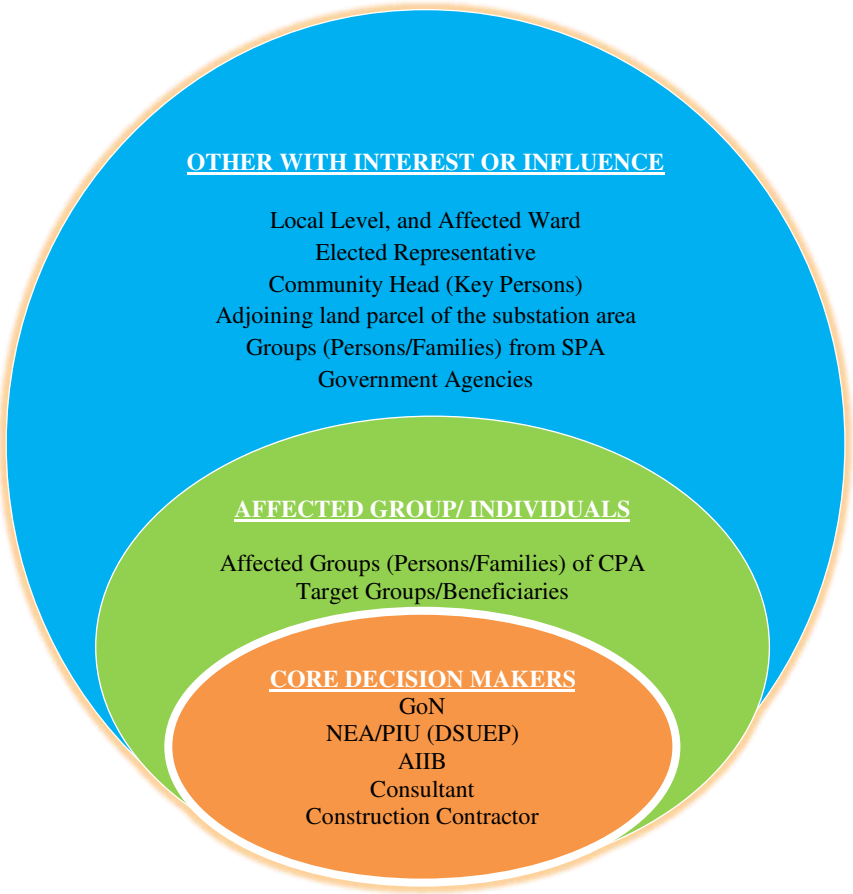


Figure 5-1: Identified Stakeholder in the Subproject[9]

ii. The notice with subject of consultation, venue, and time was pasted at Subproject footprint area, local level and affected Ward office in presence of concerned local stakeholders (**Annex 1**). People were explained about the notices and their views were noted and agreed as Minutes.

iii. Study team members visited all the local government offices within the Subproject influence area. Representatives from each local body were also consulted. All local governments were given request letters for their active support in project implementation. Municipalities were requested to provide written suggestions. The deed of enquiry (Muchulkas) and Letter of Declaration from the stakeholders are presented in **Annex 6 and Annex 7**.

[9] *Referenced Meaningful stakeholder engagement: a joint publication of the MFI working group on environmental and social standards / Reidar Kvam, PP-19, 2019.*

iv. Local communities nearby substation area and along the distribution line routes were consulted, and were briefed about the Subproject activities and likely benefits with their suggestions (included in the Minutes).

v. During the Subproject construction phase, booklets informing about the Subproject activities, likely impacts and mitigation measures together with the complaints handling mechanisms will be developed and distributed in the Subproject area.

5.2 Consultation and Information Disclosure

Consultation aims to encourage participation of stakeholders and communities of the Subproject area in identification of issues, comments and suggestions. The Subproject affected groups (persons/families) were given more emphasis during the field consultations. Public consultations were conducted at Chhedagad Municipality, Ward No. 5 Badaban on 25th January, 2022, Shiwalaya Rural Municipality, Ward No. 9, Baluwa Bazaar, on 26th January, 2022 and Shiwalaya Rural Municipality, Ward No. 1, Saltara on 27th January, 2022 (**Figure 5-2**). The concerns expressed and issues/ raised during the consultation were documented as in the form of minutes (**Annex 5**).

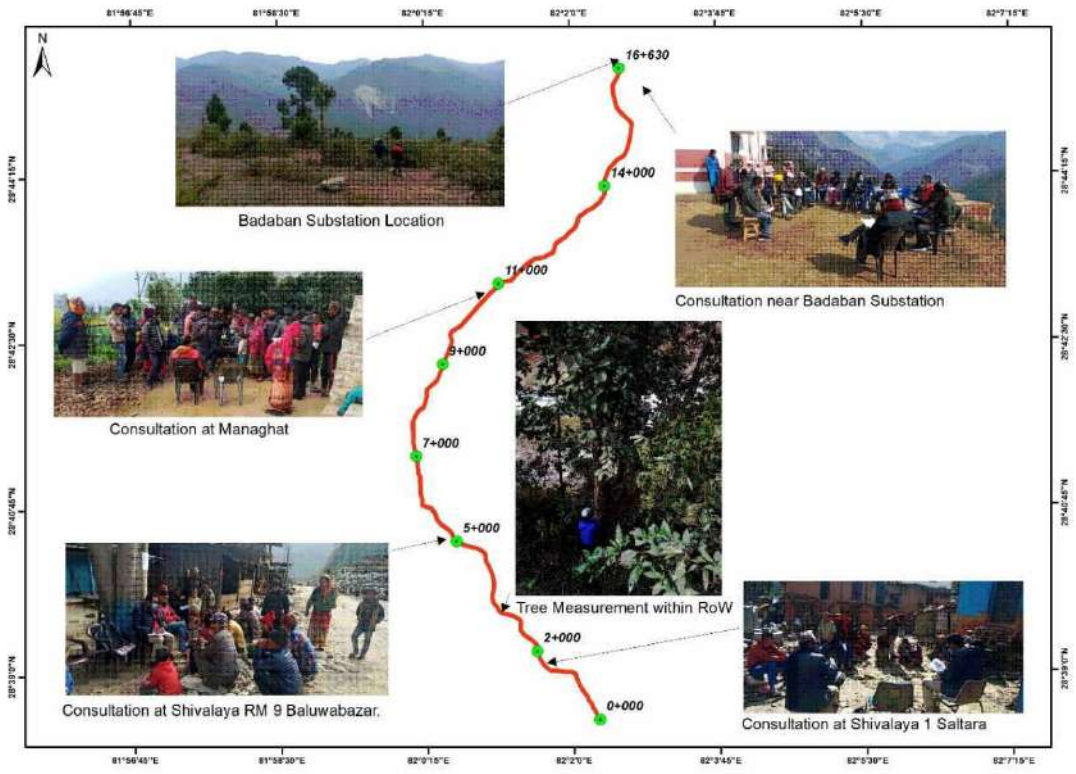


Figure 5-2: Consultation with the stakeholders and communities in the Subproject Area.[10]

Major benefits expected from the implementation of Subproject through the perspective of local people were identified from public interaction, and that included improvement in the rural electrification facilities ensuring the uninterrupted electricity in the households and better functioning of industries in the locality. The issues, comments and suggestions received in the consultation are presented in **Table 5-1**.

[10] *Field Study, 2021. Used SW Map and GIS*

5.3 Comments and Suggestion Received

Table 5-1: Summary of issues, comments and suggestions received in Consultations

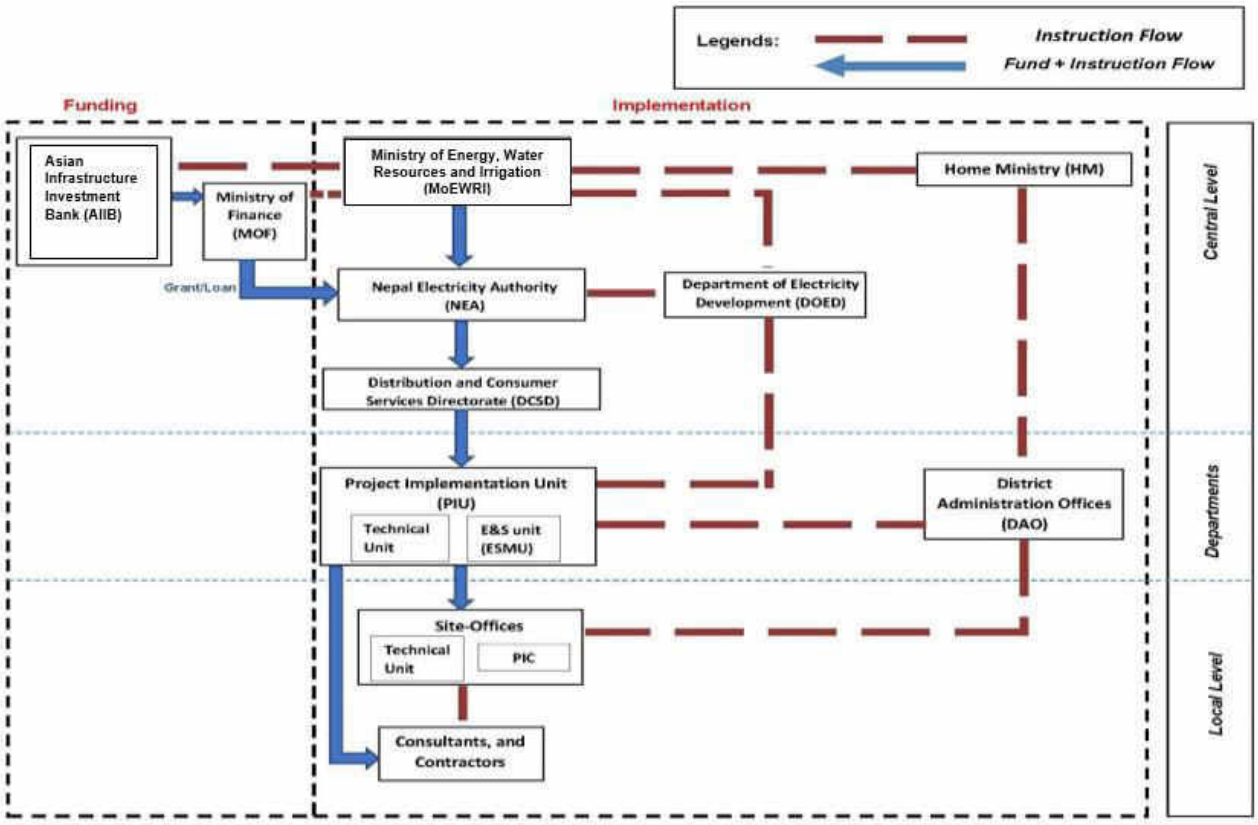
Source: Field Visit, 2022

Date	Location	Issues, comments and suggestions received	Participants
25th January, 2022	Badaban, Chhedagad Municipality, Ward No. 5, Jajarkot	• It is informed that the proposed sub-station is on Haudikadalna community forest at Chhedagad Municipality-5. • The distribution line should be installed away from the settlements area and private land. In case if it has to be passed through the private land, the pole should be installed at the edge (the up and down the side of the land). • It is informed that there is no difficulty if in case of the proposed Subproject has to be passed through the private land; the local level will consult and coordinate with landowners. • It is informed that the municipality and Wards will coordinate with those landowners who were absent in the consultation meeting and are affected by electricity pole and line distribution. • Local people should be given priority for the employment based on the knowledge and skill in the construction of the project. • While constructing the sub-project, there should not be any negative impacts on archaeological, religious momentous, or to any structures of public importance. • There are no residences of indigenous people and vulnerable families within the direct project affected area. • There is no electricity supply in this area. It is requested that the project should start its construction immediately to ensure reliable electricity service to the local people. • The construction of this proposed sub-project will have the support and cooperation of local level and stakeholder. • It is informed that there are no any places of ritual and cultural importance in the project area.	27,4F-23M
26th January, 2022	Saltara, Shiwalaya Rural Municipality, Ward No. 1, Jajarkot		18,3F-15M
27th January, 2022	Baluwa Bazaar, Shiwalaya Rural Municipality, Ward No. 9, Jajarkot		14,4F-10M

6. INSTITUTIONAL ARRANGEMENT AND GRIEVANCE REDRESS MECHANISM

6.1 Institutional Arrangement

The Ministry of Energy, Water Resources and Irrigation (MEWRI) is responsible for overall planning and execution of the plans for the overall development of water and energy sector in Nepal. Nepal Electricity Authority (NEA) under MEWRI is the responsible agency for the implementation of the DSUEP. The project comes under Distribution and Consumer Services Directorate (DCSD) of NEA. Project Implementation Unit (PIU) under DSUEP is the implementing unit of the project. Environment and Social Management Unit will be within PIU. All the resources needed for the EMP implementation for the construction and operation phase will be provided by the PIU. The site offices under PIU will have the supervision consultant with environmental and social safeguard specialist, who will be responsible for compliance monitoring activities during the construction phase. He will also provide technical support in preparing the monitoring report.



Source: ESMF-DSUEP

Figure 6-1: Institutional Arrangement for Environmental and Social Management

Contractor shall have the main responsibility to ensure the compliance. The Contractor shall prepare an Environment, Health and Safety (EHS) report that would be approved by DSUEP/PIU before field mobilization. They need to strictly follow the EHS plan requirements. Contractor shall urgently comply with corrective actions for any noncompliance as instructed by PIU. The ESMU of PIU shall provide safeguard compliance orientation to all environment monitors and safeguard team of the contractor, one month before the construction works start.

6.2 Grievance Redress Mechanism

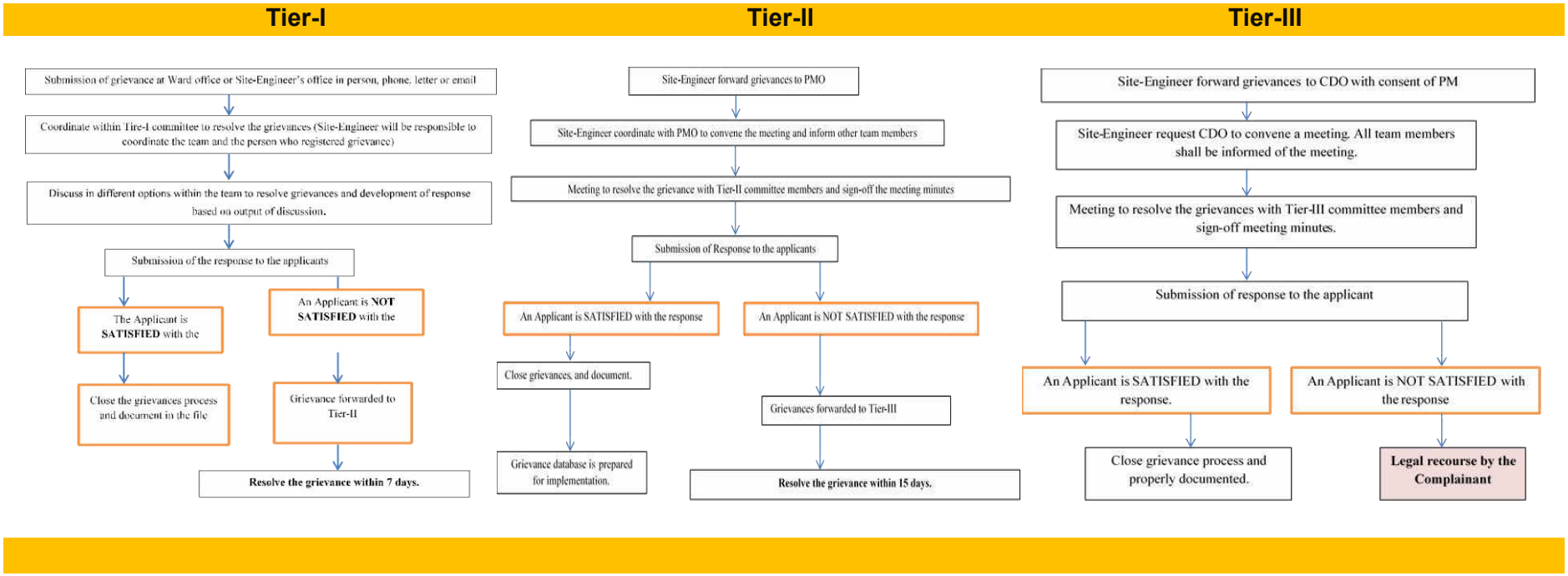
The Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental related issues at the subproject level. The GRM is designed to be simple, transparent and responsive. GRM shall address only the concerns arising due to the project implementation activities, mainly during construction stage. Social Comment Addressed -In each subproject, three levels Grievance Redress Mechanism will be established. During the ESMP study period NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the subproject level. Till date NEA has established Tier-I and Tier-II GRM has been established at local wards level and Municipality/RM level. Tier-II will be established before construction work start.

GRM process entails the concerned party submitting a grievance either in-person, or via phone, letter, or email to the Site-Engineer or the concerned Municipality Chief or the concerned Ward Chair. The Site-Engineer will record such complaint. In cases where Ward Chair has received such grievance, he/she should forward the grievance to the field office Engineer. The Site-Engineer shall notify the committee members of Tier-I and arrange meeting to resolve the received grievances. If not resolved such grievances will be carried to Tier II and Tier III. The three levels of GRM will be based on time-bound schedules as mentioned in **Table 6-1**. The subproject will carry the regular meeting for Tier-I, once a month to follow up if any grievances are received or not and to resolve the grievances received and update its status to PIU. **Figure 6-2** describes the Workflow Diagram of GRM for the subprojects.

Table 6-1: Levels of Grievance Redress Mechanism Based on Time Bound

Provisions	**Levels of Grievance Redress Mechanism**					
	First Level (Tier-I)		**Second Level (Tier-II)**		**Third Level (Tier-III)**	
Level	Local Level		Project Manager Office (PMO) headed by the Project Manager (PM) at Project Implementation Unit (PIU)		District Level	
Supervisory	NEA Site-Engineer		PMO		Chief District Officer (CDO)	
Assistance	Chief/Mayor of Concerned Local Level and Chairperson/ Representative of Ward, Construction Contractor's (CC) Representative and Project Supervision Consultant's (PSC) Safeguards Officer		NEA Site-Engineer and PSC's Social Expert, and Construction Contractor		PMO, affected persons, representative from Rural Municipality/Municipality, Site-Engineer, PSC's Social Expert. *If deemed necessary, representative from Forest Office, representative from Land Revenue Office, and representative from Land Survey Office are invited.*	
Days for Resolving Complain	7 days of receipt of a complaints/ grievance		15 days of complaints forwarded by Site-Engineer		15 days	
Committee Members	**Committee Member**	**Designation**	**Committee Member**	**Designation**	**Committee Member**	**Designation**
	Municipality Chief	Coordinator	Project Manager	Coordinator	Chief District Officer (CDO)	Chair
	Site-Engineer-NEA	Member secretary	Site-Engineer	Member Secretary	Project Manager	Coordinator
	Safeguards Expert from Consultant	Member	Municipality Chief	Member	Site-Engineer	Member Secretary
	Contractor Engineer	Member	Safeguards Expert from Consultant	Member	Municipality Chief/Ward Chair	Member
	Ward Chair	Member	Contractor Engineer	Member	Safeguards expert from consultant	Member
					Contractor Engineer	Member
					Representative from affected people	Member

Figure 6-2: Workflow Diagram for GRM from NEA[11]



***** Affected People (AP) have the right to refer the grievances to appropriate courts of law if not satisfied with the redress at any stage of the process i.e., the AP will have the choice to approach country's judicial system.

[11] *Grievance Redress Mechanism (GRM) Prepared for the sub-projects financed by Asian Infrastructure Investment Bank (AIIB) under Distribution System Upgrade and Expansion Project (DSUEP), Nepal Electricity Authority (NEA), May 2021.*

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Environmental and Social Management Plan and Mitigation Measures

The overall Environmental and Social Management Plan of the Subproject is presented in **Table 7-1**. The ESMP will be implemented in three stages: (i) pre-construction (ii) construction, and (iii) operations and maintenance. This ESMP is living document and will be updated and modified under the supervision of ESMU of PIU.

Table 7-1: Environmental and Social Management Plan (ESMP)

Project Activity	Environmental and Social Issues	Management/Mitigation Measures	Mitigation Cost	Responsibility	
				Planning and Implementation	Supervision and Monitoring
Pre-construction Phase					
Approvals, permits and clearances	• Installation of poles along the edge of private farm lands	• Site office and the contractor must inform the community prior to the installation of poles and stringing of the line along DL route		Site Office/ Contractor/	DSUEP (PIU)/NEA
Construction Phase					
Construction work in substation area and distribution line alignment	• Inadequate/unsafe working conditions	• Appropriate contract clauses to ensure satisfactory implementation of contractual environmental, health, and safety measures.		Site Office/Contractor	PIU/NEA
	• Accident may arise if the pit hole (depth-2m and diameter-0.22 m) prepared for steel tubular poles remains open for long time	• Pit holes for the steel tubular pole shall not be left open and should be filled instantly by erecting poles and concrete-cement around the base, should be used to strengthen the pole erection • Contractors should follow the guideline provided by the PIU	Project Cost	Contractor/ Site Office	PIU/ESMU/ PIU
	• Dust emission - transportation of materials and movement of	• Water sprays to be used for dust control as necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements,	Air Quality Monitoring- 1,50,000.00 (NRs.) Sprinkling water	Contractor/ Site Office	PIU/ESMU

	construction crews and equipment will cause minor impact	aggregates and spoil) to be stored in substation area. • Steel poles firstly stocked in the substation area and secondly in the open barren area in coordination with Rural Municipalities and Municipalities. No social and environmental issues for the stockpiling of the steel poles and stringing wires	(Dust Management) 2,00,000.00 (NRs.)		
	• Noise emission- Construction related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites	• Boundary walls serves as a noise barrier, and these shall be constructed as early as possible. • Construction equipment to meet national emissions and noise control standards.	Noise Level Monitoring- 50,000.00 (NRs.) Provision of PPE in Project Cost	Contractor/ Site Office	PIU/ESMU
	• Interference with drainage patterns will be temporary at substation during construction phase	• A proper drainage system should be managed within the substation area. • Storm water run-off need to be minimized and controlled with bunding temporary dikes • Drainage management as a preventive measure against breeding of mosquitoes and other pests	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Possible erosion and flooding in Chhedagad Khola	• Concrete foundation is recommended for Steel tubular pole installation for 33 kV lines. • Pit hole prepared for the installation of steel tubular pole shall not be left open as possibility of accident may arise.	Project Cost	Contractor/ Site Office	PIU/ESMU
		• Protection works along the eroded sections in the Chhedagad Khola, 20-30 m distance from the	Cost from Local Government	Shiwalaya RM Chhedagad Municipality	Shiwalaya Rural Municipality Chhedagad

		distribution line. • Client needs to coordinate with local level governments to give priority for the embankment activities for the protection of cultivated land and proposed 33 kV distribution lines.			Municipality/PIU
	• Construction associated wastes generated within substation area and campsite location	• Organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered, by a thick layer of soil • Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix should be used as refills for ground leveling. • Recyclable wastes like left out/non-usable reinforcement bars and packing materials to be sent or sold to scrap vendors. • Effective coordination with local level government for the proper waste management	Solid wastes management – 1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
	• Illegal fishing and bird hunting by the labors	• Discouraged by supplying adequate food items (poultry and fish) requirement within the camp. • Awareness on legal provisions upon illegal hunting of biodiversity need to be disseminated	Project Cost	Contractor/ Site Office	PIU/ESMU
	• About 8.97 ha of forest area occurs within RoW of the DL and substation area • Estimated number of trees that need to be cleared from the Core Project Area of the	• Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019). • Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.	The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report	Contractor/ Site Office	PIU/ESMU

	proposed DL alignment and substation are 1,778				
	• Use of firewood from nearby forests	• Workers and staffs should be restricted to use firewood for cooking. • Providing LPG based stoves in Labor camp.	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Loss of standing crops at pole installation locations (depth-2m and diameter-0.22 m)	• Pole to be installed at the edge of cultivated land making no loss of standing crops • Need to make prior consultation with landowner during installation of the pole and stringing of distribution lines • If there is loss of crops, appropriate compensation will be made by the project	Project Cost	Contractor/Site Office	PIU/ESMU
Environment, Health and Safety	• Injury and sicknesses workers and members of the public • Potential fecal coliform contamination in drinking water	• Contractor shall prepare the Environmental, Health and Safety plan and take approval from the client. Provision of safety officer in the work team shall be made during construction period. • All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. • Basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid shall be made available for the campsite. • Provision of health insurance to employees. • Security fences around the substation. • Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs). • Awareness on HIV/AIDS and other sexually transmitted disease. • Awareness on providing basic sanitation facilities and waste management control to the labors. • For coronavirus (COVID-19) pandemic situation, Contractors should arrange for quarantine and	Establishment of Labor Camp with basic facilities – In Project Cost	Contractor/Site Office	PIU/ESMU

		health services for infected workers.	EHS Awareness Trainings - 1,50,000.00 (NRs.) COVID-19 measures 2,00,000.00 (NRs.)		
Management of electric equipment's, toxic materials of chemical wastes	• Possible spills resulting in contamination of soil, water, and air	• Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container, and sealed carefully	1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
Operation and Maintenance Phase					
Electric shock and fire hazard	• Injury or death to the workers and public	• Use of insulation, guarding, grounding, electrical protective devices, and safe work practices. • Boundary walls and / or security fences around substations to prevent unauthorized access. • Only trained and authorized personnel shall be allowed for the electrical works. • No electric wire to be stringed above the house. Installation of warning signs.	Project Cost	NEA	NEA
Routine operations and maintenance	• Potential disturbance to other utility functions and vehicular traffic.	• Maintain warning / advisory signs in good and visible condition • Visual and technical inspection	Project Cost	NEA	NEA
Oil spillage	• Contamination of land/nearby water bodies	• Substation transformers should be stored within secure and impervious bundled areas with a storage capacity of at least 110% of the capacity of oil in transformers and associated reserve tanks.	Project Cost	NEA	NEA
Bird electrocution	Electrocution can	Provision of bird guards above the poles and white	Project Cost	NEA	NEA

and collision	cause a risk to bird species which perch on power line infrastructures	spirals on the conductors to improve visibility			

(*The provision of environment and social management cost should be included in the project cost making each items visible in BOQ of bidding document for the safeguard compliance by the construction contractor*

7.2 Proposed Monitoring Plan

The monitoring proposed in **Table 7-2** will be of value primarily for establishing baseline conditions in the Subproject area, and then for ambient quality monitoring.

Table 7-2: Minimum Provisions for Environmental Monitoring

Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
Construction Stage				
Clearing of construction site	Substation boundaries	• Field inspection of Subproject Sites and ensure that appropriate safety measures are implemented	Clearing and restoration: weekly	Contractors to implement corporate EHS plan, drainage management and solid waste control in substation area.
Use of forest area and loss of trees	33 kV DL and Substation	• Field inspection of Subproject sites and ensure the compensatory plantation of 1:10 • Related approval document for tree clearance	Prior to the construction work	Contractor responsibility under the supervision of PIU/DFO
Air: SPM, Noise: dB(A)	Substation boundaries and nearest receptor to substation	• Spot check for noise and dust using portable monitoring device	Air, and noise: quarterly during construction period	Contractors need to conduct the air and noise monitoring during the construction period at the substation location

Construction wastes: on-site inspection	Visual inspection of active construction areas, including equipment staging areas and camps	• Spot check / visual inspection of solid waste (spoil, muck etc.) generation and disposal. • Analysis of transformer oils to determine if polychlorinated biphenyls are present.	Monthly spot checks for construction waste management	PIU safeguard officers to provide oversight via regular field inspections, and submit monitoring reports to the Bank
Construction and Operation Stage				
Occupational health and safety	Substation boundaries	• No. of Toolbox talk and safety orientation to the workers • No. of workplace accidents • Use of PPE by workers	Daily Inspection during construction Monthly Inspection during operation phase	Inspection of the construction site by safety officer and PIU safeguard officer
Child involvement in construction work (need to be prohibited)	Substation work	• Spot inspection at construction sites	Monthly Inspection during construction	Site Office

7.3 Environmental and Social Management Plan Cost Estimates

Preliminary cost estimates for the ESMP implementation are shown in **Table 7-3**. These estimates cover the basic monitoring activities and the mitigation measures to be complied from the contractor's side. The ESMP cost estimated for the **Chhedagad-Badaban Distribution Line** is NRs 13,00,000.00. The community support activities and the costs will be presented in the Community Development Plan (CDP). NEA has agreed for the effective implementation of the mitigation and monitoring cost items as mentioned in table below.

Table 7-3: Mitigation Measures and Monitoring Activities Cost Estimates

SN	Budget Items	Unit	Rate (NRs.)	Total Amount (NRs)
1	Air Quality Monitoring (at substation)	6 (Times)	25,000.00	150,000.00
2	Noise Level Monitoring (at substation)	6 (Times)	8,334.00	50,000.00
3	Sprinkling of water to be used for dust control necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil)	200 (Times) During Excavation and Civil works	1000.00	2,00,000.00
4	Management of electric equipment's, toxic materials of chemical wastes	-	L.S.	1,00,000.00
5	Segregation and management of solid wastes	-	L.S.	1,00,000.00
6	COVID-19 measures (considering pandemic situation) standardize the quarantine facilities with health aid to the labors	-	L.S.	200,000.00
7	EHS Awareness raising trainings to the labors	10 (Events)	15,000.00	1,50,000.00
8	Meeting of Safeguard Desk and Grievance Redress Committee at Field Level	24 (Months)	14,583.00	3,50,000.00
Total				**13,00,000.00**

8. CONCLUSION

Potential environmental impacts of this Subproject are not diverse and are all site-specific i.e., confined to the Core Project Area. Civil works will have minimal temporary impacts on air, noise and water quality. Erection of poles during construction shall follow right of way of existing roads and the edge of farmlands. The PIU should give prior information before installation of the poles. In the ESMP consultations conducted in the settlement area, people have agreed for the implementation of the Subproject and have suggested to install poles on the edge of farm-lands, without affecting any private structures along the distribution line. If there is loss of crops, appropriate compensation shall be provided. The implementation of the proposed Subproject needs 8.97 ha of forest area with estimated loss of 1,778 trees. The total enumeration of the loss trees and the mitigation cost will be incorporated in the Brief Environmental Study (BES) report. Mitigation measures are suggested in this ESMP to avoid any possible environmental and social impacts. The total ESMP cost for this Subproject is NRs. 13,00,000.00. NEA Project Implementation Unit has agreed to implement the estimated cost for the mitigation measures and monitoring activities.

REFERENCES

CBS. (2019). Environmental Statistics of Nepal. Kathmandu: Central Bureau of Statistics.

CBS. (2018). Rural Municipality-Municipality Profile of Jajarkot District. Jajarkot: Office of Statistics.

DHM. (2021). Retrieved from http://mfd.gov.np/city?id=26

DoS. (2020). Data & Metadata. Retrieved from National Spatial Data Center: Geoportal: http://nationalgeoportal.gov.np

Environmental and Social Framework (ESF) Asian infrastructure investment Bank, Feb 2016 (Amended February 2019).

Environmental and Social Management Framework (DSUEP) NEA- November 2021

EPA. (2019). Environmental Protection Act. Kathmandu: Government of Nepal.

EPR. (2020). Environmental Protection Regulation. Kathmandu: Government of Nepal.

GoN (2019): Environmental Protection Act (EPA), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN (2020): Environmental Protection Rules (EPR), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN. (2050). National Environmental Impact Assessment Guidelines. National Planning Commission Secretariat.

GoN. (2019). Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, Ministry of Forests and Environment, Singhadurbar, Kathmandu.

Shahi, D. K., Rijal, H. B., & Shukuya, M. (2019). Study on Household Energy Usage Patterns in Urban and Rural Areas. Journal of the Institute of Engineering, 15 (No. 3), 402-410. doi:https://doi.org/10.3126/jie.v15i3.32761

Stakeholder Engagement Strategy, DSUEP, NEA 2019.

The White Paper. (2018). Energy, Water Resources and Irrigation Sector's Status and Roadmap for the Future. Kathmandu: Government of Nepal.

WBG. (2018). https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2018&locations=NP&start=1996&view=chart. Retrieved from https://www.worldbank.org.

WECS. (2014). Energy Data Sheet. Water and Energy Commission Secretariat. www.energyefficiency.gov.np/downloadthis/final_data_book__11_june_2014.pdf

ANNEXES

Annex 1: SAMPLE NOTICE FOR PUBLIC CONSULTATION AND GRM FORMATION LETTER TO STAKEHOLDERS

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक अध्ययन प्रतिवेदन तयारी सम्बन्धि सूचना

सूचना प्रकाशन मितिः .....

..... प्रदेश ..... जिल्ला .....(नगरपालिका/गाउँपालिका/महानगरपालिका/उपमहानगरपालिका) मा एसियन इन्फ्रास्ट्रकचर इन्भेस्टमेन्ट बैंकको ऋण सहयोग भएको नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना कार्यान्वायन हुनुभन्दा अघि सो आयोजनाले त्यस क्षेत्रको वातावरण तथा सामाजिक पक्षहरुमा के-कस्तो प्रभाव पार्दछ भनि स्थानीय सरोकारवालाहरु सँग छलफल गर्न आयोजना क्षेत्रका सम्पूर्ण सबै सरोकारवालाहरुको निम्न स्थान तथा समय उपस्थितिका लागि यो सूचना प्रकाशित गरिएको छ।

सार्वजनिक छलफल हुने स्थान, मिति र समय:

स्थान:

मिति:

समय:

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

(ए.आई.आई.बि.)

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

प.सं. ०७८/७९: ९३८. मिति: २०७८/१०/०७

श्री .....
.....

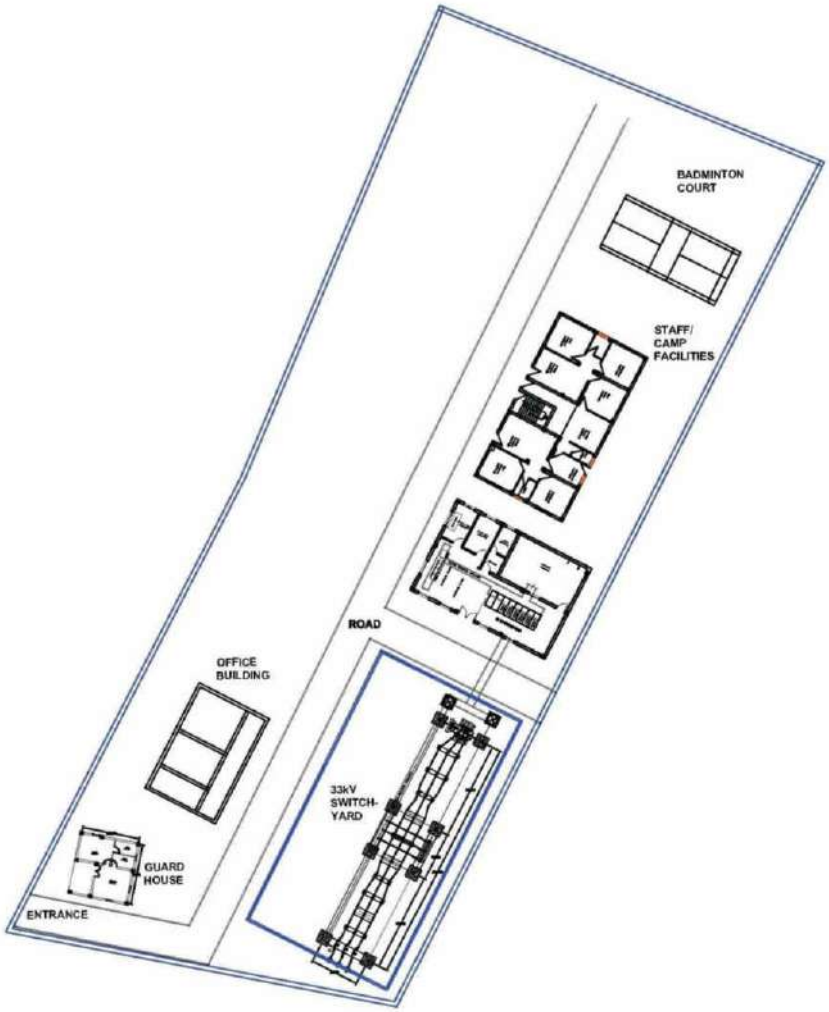
विषय: गुनासो समाधान संयन्त्र गठन भएको सम्बन्धमा।

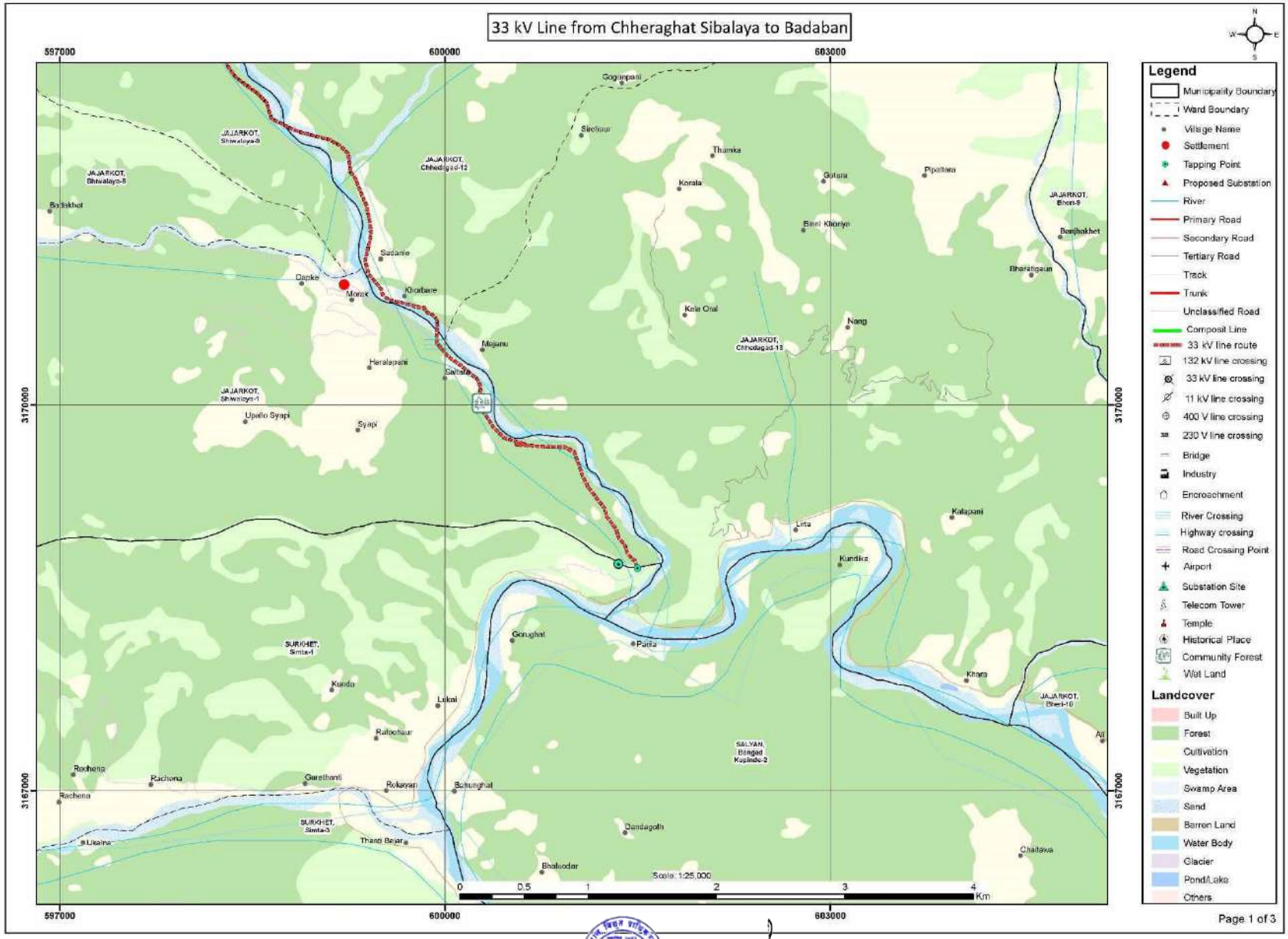
उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्वेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ए.आई.आई.बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम तहाँ ***वडा/गाउँपालिका/नगरपालिका/उप-महानगरपालिकामा*** ३३/११ के.भी. सब-स्टेशन, ३३ के.भी. लाईन, ११ के.भी. लाईन, ४०० भी. लाईन, आदि निर्माण कार्यहरु हुने भएकोले सो कार्यहरु गर्दा स्थानीय सरोकारवालाहरुको कुनै गुनासो भए सो गुनासोको समाधान गर्न गुनासो समाधान संयन्त्र निर्माण गरिएको छ। अतः संलग्न गुनासो समाधान संयन्त्र दस्तावेज बमोजिम आफ्ना गुनासोहरु दर्ता गर्न र सोही दस्तावेजमा भनिए बमोजिम गुनासोको समाधान हुने व्यहोरा सम्पूर्ण सरोकारवालाहरुलाई जानकारी गराइन्छ।

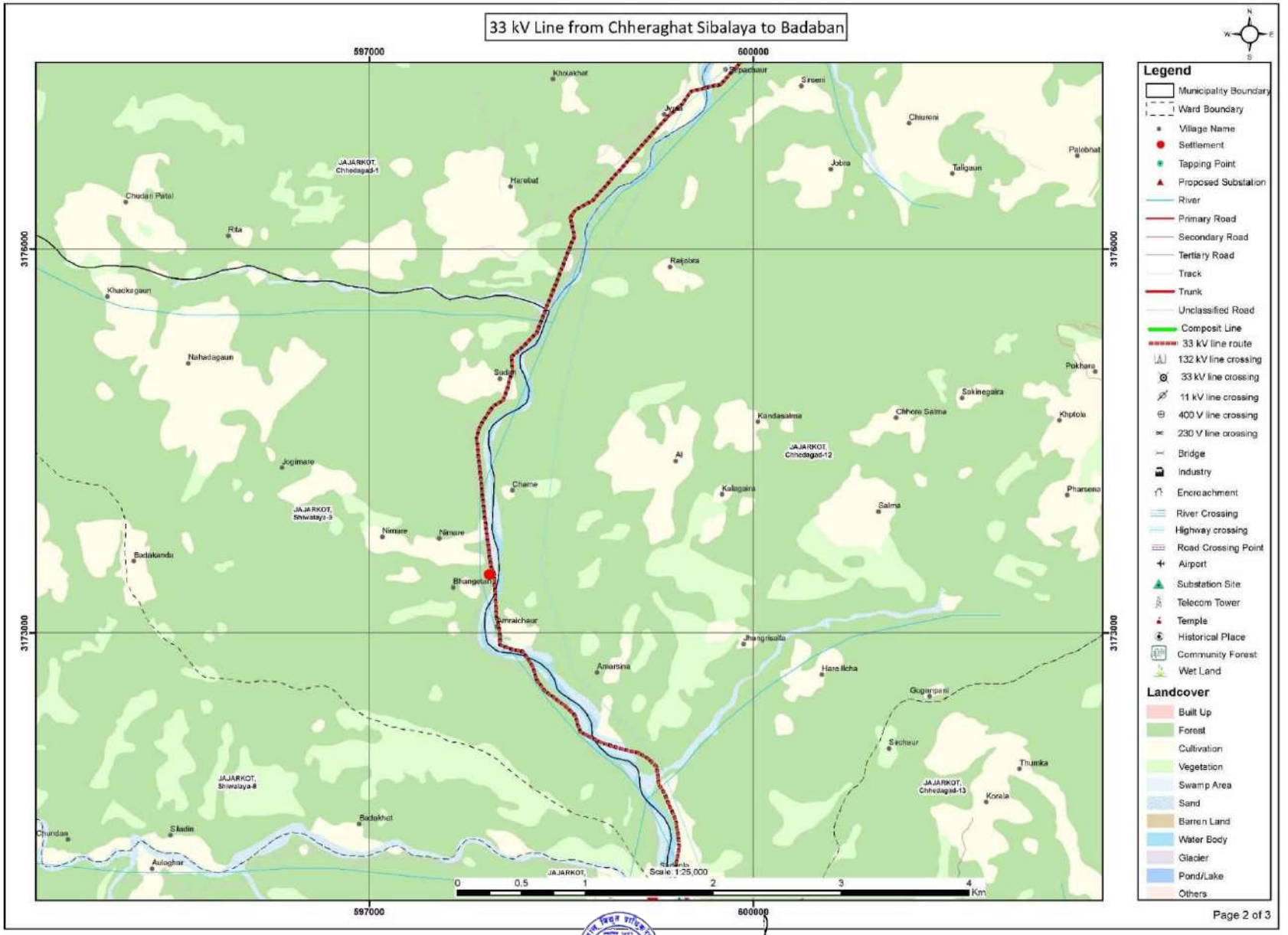
भवदीय,

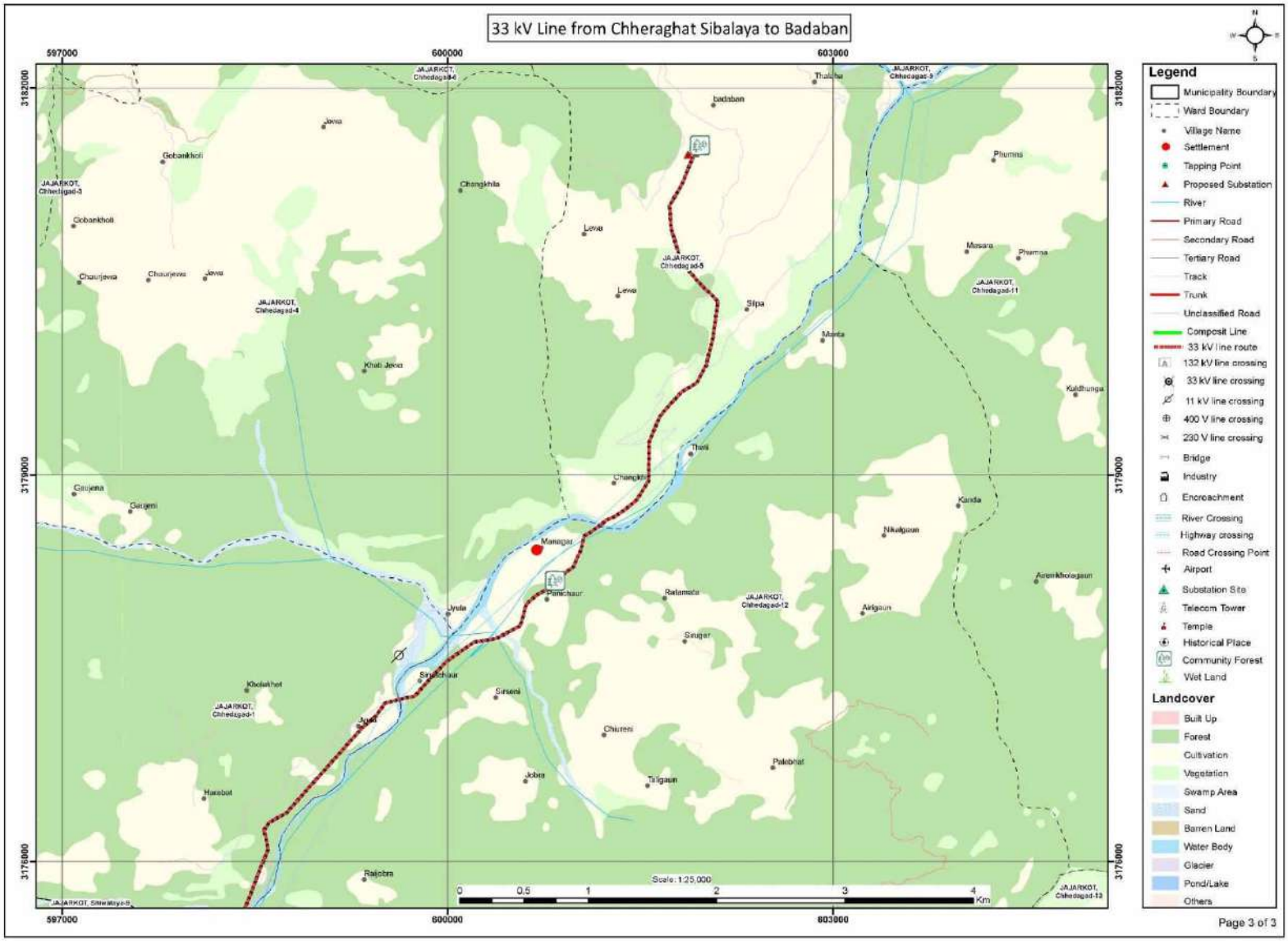
(केशव श्रेष्ठ)
आयोजना प्रमुख

Annex 2: LAYOUT MAPS OF SUBSTATION AND DISTRIBUTION LINE ALIGNMENT




33 kV Line from Chheraghat Sibalaya to Badaban
597000
600000
603000
3170000
3167000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Tapping Point
Proposed Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
33 kV line route
132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Scale: 1:25,000
0 0.5 1 2 3 4 Km
Page 1 of 3


33 kV Line from Chheraghat Sibalaya to Badaban
597000
600000
3176000
3173000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Tapping Point
Proposed Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
33 kV line route
132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Scale 1:25,000
0 0.5 1 2 3 4 Km
Page 2 of 3


33 kV Line from Chheraghat Sibalaya to Badaban
597000
600000
603000
3182000
3179000
3176000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Tapping Point
Proposed Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
33 kV line route
132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
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Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Scale: 1:25,000
0 0.5 1 2 3 4 Km
Page 3 of 3

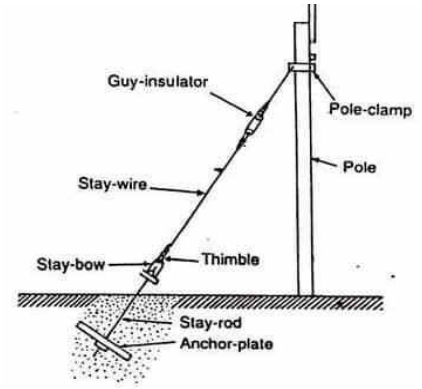
Annex 3: FACILITY AND COMPONENTS



Transformer



Switch Yard



Stay/Guy Sets



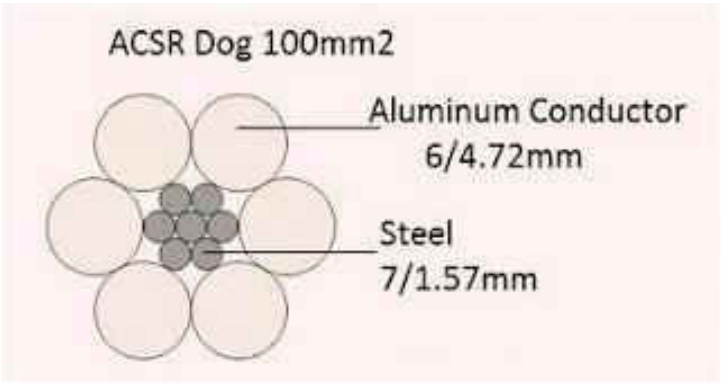
Steel Tubular Pole



Insulator

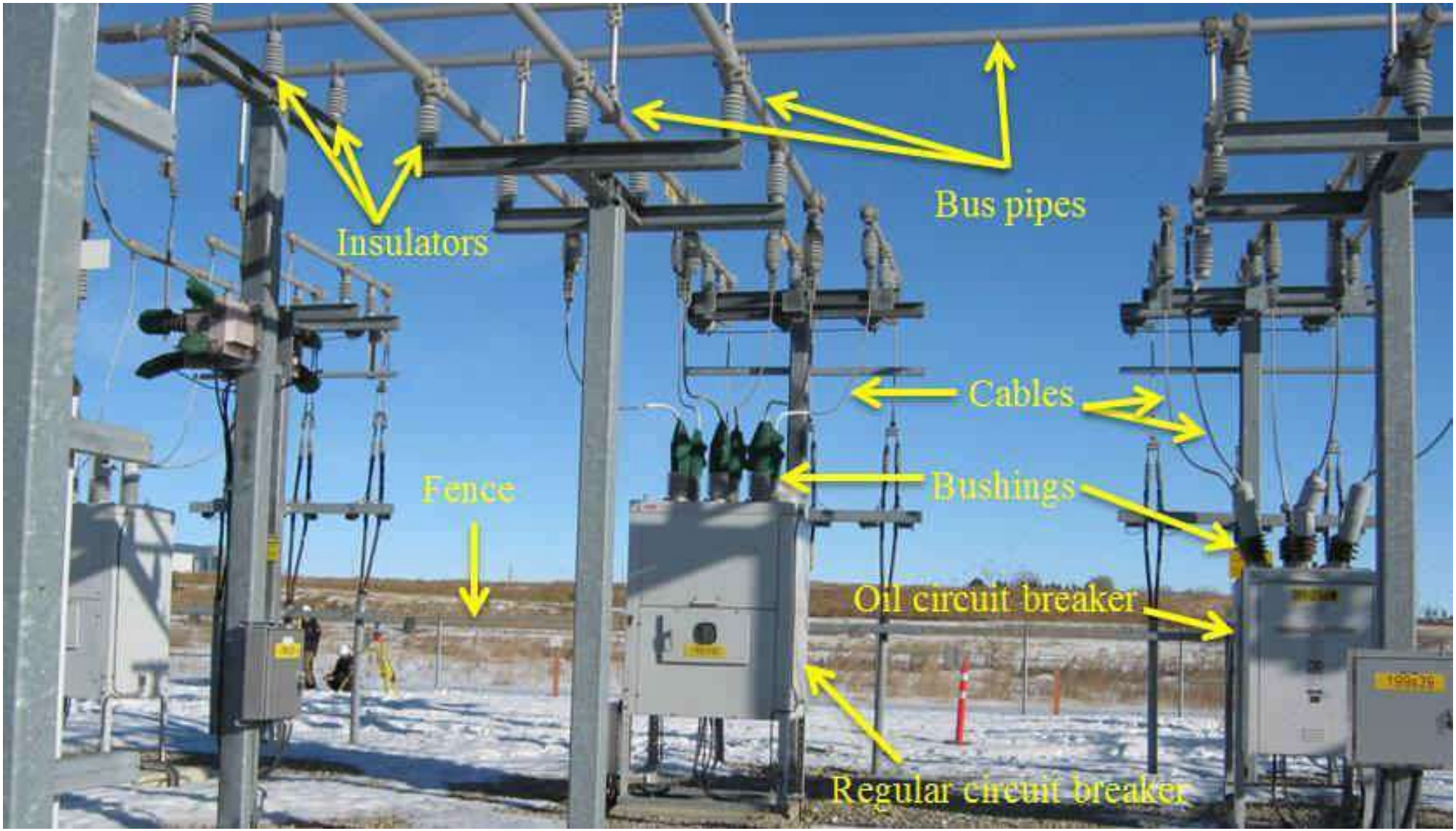


Civil-Structures Supporting Electrical Components





Conductor



Possible components within 33 kV/11 kV Substation



Bird Diverting Reflector



Wishbone Prevents Bird Landing on Wire



White Spiral in Wire Improves Visibility of Wire



Construction of Nest at Poles also divert Brid not sitting at Wires

Annex 4: LEGISLATIVE PROVISIONS

SN	Legal Provisions	Description	Relevancy concerning Project
1.	**Constitution of Nepal**	● The Constitution of Nepal is the main legal document, which emphasizes the right to a clean environment of the people, natural resources protection, preservation, and its prudent use. Rights regarding the clean environment, under article 30: ● It includes making multi-purpose development of water resources, while according priority to domestic investment based on public participation to ensure a reliable supply of energy affordably, and easily, and make proper use of energy for the fulfillment of the basic needs of citizens, by generating, and developing renewable energy in article 51 (g).	DSUEP helps to fulfill the rights of people to live in a clean environment along with fulfilling the basic needs by providing access to sufficient energy.
2.	**Environment Protection Act 2076 (2019 AD)**	● Section 3 of the Act requires the proponent to conduct environmental studies concerning the prescribed proposals of any developmental works. Subsection 2 of this act provides the framework for the environmental study report prepared according to sub-section (1) shall, in fulfillment of the process as prescribed, be submitted to the relevant bodies of the Government of Nepal for approval.	Environmental Studies, and approval of the report from the authorized body before construction of any project is mandatory to minimize the negative impacts in Nepal which is addressed in EPA, 2076.
3.	**Environmental Protection Rule, 2077 (2020 AD) [First Amendment on 2078 (2021)]**	● Under the Environmental Protection Rules (2020) first amendment (2021), rule (3) as mentioned in annex (1), Section (F) (Energy, Water Resources, and Irrigation Sector) sub-section (1), a proponent shall be required to carry out the Brief Environmental Studies for construction of transmission line project less than 66 kV in forest land for another purpose.	This rule provides the overall guidance to what type of environmental studies is required according to the project by the Government of Nepal.
		● Pertaining to Rule 3(1), Environment Protection Act (EPA), 2019 describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1)	The proposed Subproject will use the of Haudi Kadalna

		under Environment Protection Regulation 2020 (First Amendment in 2021/05/24 on Nepal Gazette) state "use of forest area for the electricity distribution line project up to 66 KV"	Community Forest, Chhare Khola Community Forest and Nahada Community Forest land for the purpose of 33 kV distribution line extension and substation construction. For which, BES is mandatory.
4.	**Nepal Environmental Policy, and Action Plan, 2050(1993)**	The aims of NEPAP are: ● To manage natural, and physical resources efficiently, and sustainably ● To balance the development efforts, and environmental conservation for sustainable fulfillment of basic needs ● To preserve endemic, and endangered species, and their habitats; the promotion of private, and public institutions for biological resources inventory, and conservation ● To safeguard national heritage ● To mitigate the adverse environmental impact of development projects, and human actions ● To integrate environment, and development through appropriate institutions, adequate legislation, and economic incentives, and sufficient public resources	DSUEP should follow the aims of NEPAP to protect, and conserve the physical, biological, and social environment during the construction of a 33 kV distribution line along with a substation.
5.	**Forest Act 2076 (2019)**	• Pertaining to the chapter 12, Section 42(1), if there is no other alternative to the using of forest area for the operation of a national priority project, plan of which investment is approved by the Investment Board, project of national pride and it appears from the environment examination referred to in the prevailing law that the operation of such plan does not result in significant adverse effects on the environment, the Government of Nepal may give approval, as prescribed, to use any part of the national forest for the purpose of operating such plan, • Similarly, In providing the forest area for the operation of a plan pursuant to sub-section (1), to the extent possible, a land that is adjoining to the national forest area near the project site and situated in the same geographical and ecological belt and has such landscape where forest can be	• About 8.97 ha of forest area occurs within RoW of the proposed 33 kV distribution line and substation area • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment and substation are

		developed shall be provided for the purpose of planting trees at least in the area equal to the forest area that has to be used.	1778
6.	**Work Policy with the Guideline of Forest Land Area to be Use for National Priority Plan, 2076 (2019)**	• Pertaining to Section 4 (1), environmental study report should be prepared if the project needs the use of national forest area, • Section 7 require the approval of Government of Nepal, for the use of forest on the implementation of project • Section 17 (3) require plantation of trees in the ratio of 1:10 in the area given by the concerned forest office as a compensation for the removal trees during the project implementation • Section 17 (4) require care, maintenance and upkeep of the planted trees and handover to concerned forest office after 5 years.	• About 8.97 ha of forest area occurs within RoW of the proposed 33 kV distribution line and substation area • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment and substation are 1778
7.	**Electricity Act 1992**	● No person shall be entitled to conduct survey, generation, transmission, or distribution of electricity without obtaining a license under this act. ● The Electricity Act of 1992 has the provision of land procurement for the development of Subprojects that involve electricity generation, transmission, or distribution. The Act states that the licensee may apply to GoN to purchase the land or house of any person if it is required for the generation, transmission, or distribution of electricity. Upon the receipt of such an application, GoN may make the land or house, so requisitioned, available to any corporate body under the prevailing laws.	The main goal of this project is to distribute a sufficient amount of electricity by constructing a 33kV line, and substation by surveying to minimize the impacts.
8.	**Rural Energy Policy, 2006**	The rationale of formulating, and implementing this policy is to create a conducive environment that will self-motivate, and mobilize local institutions, rural energy user groups, non-government organizations, cooperatives, and private sector organizations for the development, and expansion of rural energy resources. The government will facilitate, and promote to involve private development, and expansion of new technologies. It has also envisioned subsidy provision for the	This project helps to improve the distribution and motivate use the of electricity in rural areas of western Nepal.

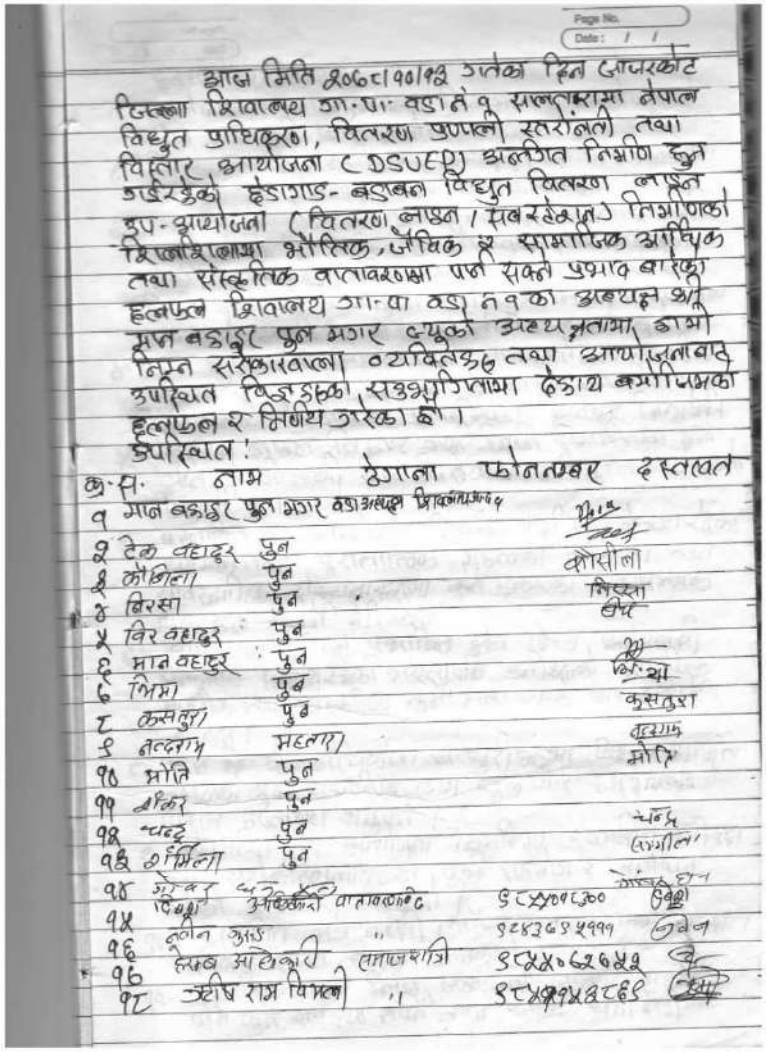
		promotion of such renewable energy technologies.	
9.	**Labor Act, 2074 (2017 AD)**	This labor Act was made under the management of parliament under sub-clause 1 of clause 296 of the Constitution of Nepal. Sub-section 3 of Section 2 states that the employees should not be compelled to other work other than they are assigned for. In addition, Sub-section 5 of Section 2 states about the prohibition of child labor in any organization, and sub-section 6 of Section 2 states that there should not be any kind of discrimination among the employee's regard of religion, ethnicity, gender, origin, language, or intelligence or other kinds of characters.	The construction of a project is only possible when the rights of labor are secure. In this project, the Contractor should follow this act strictly.
10.	**Child Labor (Prohibition, and Regulation) Act, 2056 (2000 AD)**	As per section 3 of this act, no child has not attained the age of 14 years shall be engaged in works as a laborer.	Child labor is strictly prohibited in this project, and Contractors should follow this act.
11.	**Solid Waste Management Act, 2068 (2011 AD)**	This act has been formulated to minimize solid waste products from the target area by setting rules, and regulations on solid waste management (SWM) in the country to develop a better environment for the systematic, and effective management of solid waste, and to involve all the concerned stakeholders in SWM practice. The main features of this act are the discussion of the 3R principle (Reduce, Reuse, and Recycle). 3R principle seems to be very beneficial as it not only increases the life of landfill site but also saves the money which could be used for other infrastructure development. Section 4 of the act assigns the local body to manage or use the solid waste discharged or dumped in the collection center, transfer station, or treatment plant or collected during cleaning.	These acts provide the overall framework to manage the solid waste generated from households to the project level. Also, the proponent should manage the waste generated during construction.
12.	**Solid Waste Management Rules, 2070 (2013 AD)**	The solid waste management rule was formulated as per the provision made in article 50 of the Solid Waste Management Act, 2068. This regulation has emphasized the segregation of waste at source, and mentioned that the responsibility of proper disposal, and management of source belongs to the producers themselves. Section 3 of the rule describes the segregation, and management of	These rules provide the overall framework for how to reduce the volume of waste disposed of at the source during the construction of the

		solid waste. It has been mentioned that it is essential to segregate degradable, and non-degradable solid waste at the source.	substation.
13.	**Fifteenth Plan**	The vision of the 15th plan is to contribute to the prosperity of the nation through sustainable, and reliable development of hydropower by setting the goal which is to ensure energy security through intensifying hydropower generation. In addition, one of the strategies of the government of Nepal in the 15th plan is to make the distribution system effective, and reliable to increase energy efficiency, and increase power consumption by expanding access to electricity by formulating the required policies:	This 5-year interim plan sets the goal about the generation, and distribution of hydroelectricity in Nepal which is directly related to this project.
14.	**United Nations Framework Convention on Climate Change (UNFCCC), 1992**	UNFCCC, Signatories: 165. Parties: 195. (1), Article (4), commitment (f) states climate change considerations into account, to the extent feasible, in their relevant social, economic, and environmental policies, and actions, and employ appropriate methods, for example, impact assessments, formulated, and determined nationally, to minimize adverse effects on the economy, on public health, and the quality of the environment, of Subprojects or measures undertaken by them to mitigate or adapt to climate change. After it entered into force on 21 March 1994, it mandates the individual state for prioritization of resource conservation with development.	The goal of this project is to replace the traditional form of energy with clean energy i.e. electricity which ultimately reduces air pollution, and smoke.
15.	**ILO 169**	The main objective of this convention is to secure the rights of indigenous, and tribal people along with the gender equality, and non-discrimination of workers during work. Article 1 on the First Part of this convention mainly focused on the following points: (a) the social, cultural, and economic conditions of tribal peoples in independent countries differentiate from other parts of the national community, and their status is managed fully or partially by their customs or traditions or by special laws or regulations; (b) peoples in independent countries who are regarded as indigenous on account of their	Nepal is the part of ILO convention that's why ILO 169 should strictly follow during construction, and implementation of any types

		descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries, and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions. ● Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply. ● The use of the term people in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law.	
16.	**Environment and Social Management Framework**	● ESMF is to guide DSUEP sub-projects in the area of E&S management using appropriate instruments, methodologies, procedure and responsibilities during the project cycle. NEA and the project partners shall apply during design and development of the sub-projects in order to comply with the Government of Nepal E&S regulations and the Financiers' standards on E&S assessment and management, Involuntary Resettlement, Indigenous People, Gender, etc.).	Main guiding document for E&S study to identify issues and recommending appropriate practical augmentation/ mitigation measures
17.	**Environmental and Social Policy (ESP)**	● This policy speaks for the mandatory E&S requirements for each Project like, screening, DDR, E&S Assessment, ESMP, ESMF, Information Disclosure, Consultation and Monitoring and Evaluation.	Mandatory requirement for ESMP study
18.	**Environmental and Social Standards of AIIB** [12]	● Three associated mandatory environmental and social standards (ESSs) set out more detailed environmental and social requirements relating to the ESMP	ESMP requirement

[12] *https://www.aiib.org/en/policiesstrategies/download/environmentframework/20160226043633542.pdf*

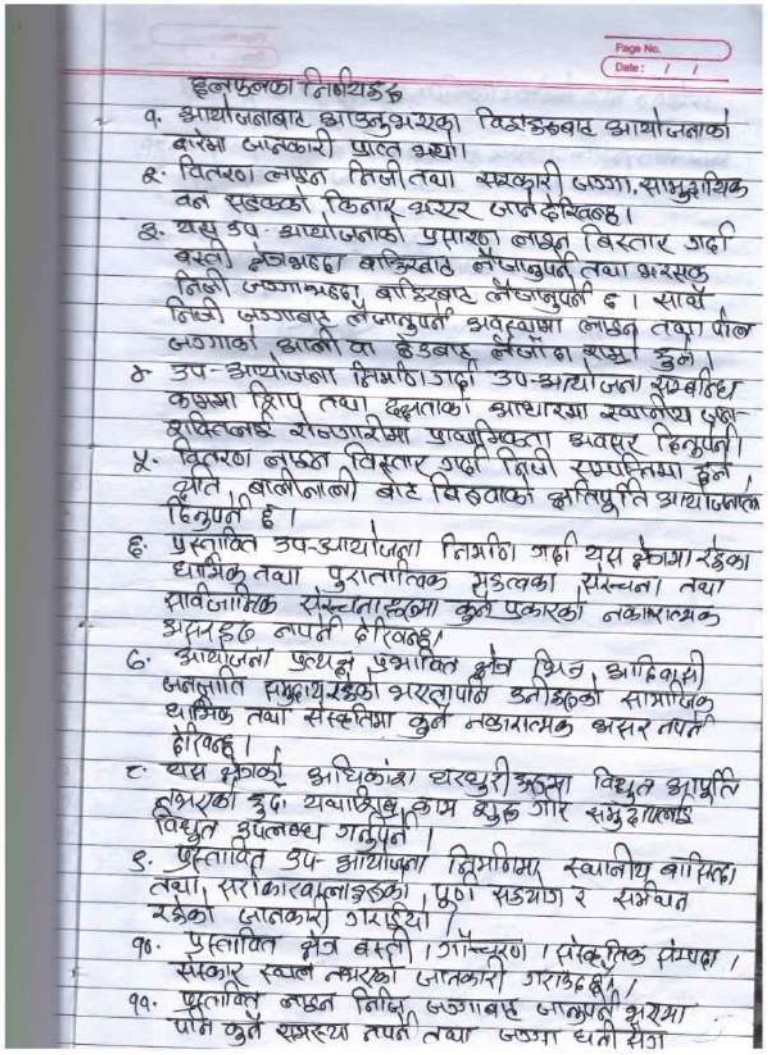
Annex 5: CONSULATATION MEETING MINUTES



आज मिति २०७८।१०।१४ गतेका दिन दार्चुलाकोट जिल्ला शिवालय गा.पा. वडा नं १ सल्लाघाम नेपाल विद्युत प्राधिकरण, वितरण प्रणालको सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुने छेडागाड- बडाबन विद्युत वितरण लाइन उप-आयोजना (वितरण लाइन / सबस्टेशन) निर्माणका क्रियाकलापका भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्न सक्ने प्रभाव बारेको छलफल शिवालय गा.पा. वडा नं १ का अध्यक्ष श्री मान बहादुर पुन मगर ज्यूको अध्यक्षतामा तथा निम्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञहरुका सहभागितामा देहाय बमोजिमको छलफल र निर्णय गरिको हो।

उपस्थित :

क्र.सं.	नाम	ठेगाना	फोननम्बर	दस्तखत
१	मान बहादुर पुन मगर	वडाअध्यक्ष शिवालय गा.पा.		
२	टेक बहादुर	पुन		
३	कौशिला	पुन		कौसीला
४	बिरसा	पुन		बिरसा
५	वीर बहादुर	पुन		
६	मान बहादुर	पुन		
७	निमा	पुन		
८	कुसुदा	पुन		कुसुदा
९	नन्दराम	महतारा		
१०	मोति	पुन		मोति
११	चन्द्र	पुन		चन्द्र
१२	चन्द्र	पुन		
१३	उर्मिला	पुन		उर्मिला
१४	[illegible]	[illegible]	९८४४०८३००	
१५	दुर्लभ आई	"	९८४३७४५९९९	
१६	[illegible]	लाजघाटी	९८४४०६२७४५	
१७	ऋषि राम पिलाको	"	९८४४१४४८६९	



छलफलका निर्णयहरु

१. आयोजनाबारे आउनुअघिको विद्युतीकरण आयोजनाको बारेमा जानकारी प्राप्त भयो।

२. वितरण लाइन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार वरपर जानेछ।

३. यस उप-आयोजनाको प्रभावित लाइन विस्तार गर्दा बस्ती क्षेत्रबाट बाहिरबाट लैजानुपर्ने तथा अरुसँग निजी जग्गाबाट बाहिरबाट लैजानुपर्ने छ। सार्वे निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाइन तथा पोल जग्गाको छातो वा हेडबाट लैजाँदा क्षमा हुने।

४. उप-आयोजना तिर्माण गर्दा उप-आयोजना सम्बन्धि कुराहरु तथा छलफलको आधारमा स्थानीय उपलब्धिलक्षित रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।

५. वितरण लाइन विस्तार गर्दा निजी सम्पत्तिमा हुने क्षति, बाली नाली बोट बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।

६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रका रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनालाई कुनै प्रकारको नकारात्मक असर नपर्ने हेरिनुपर्ने।

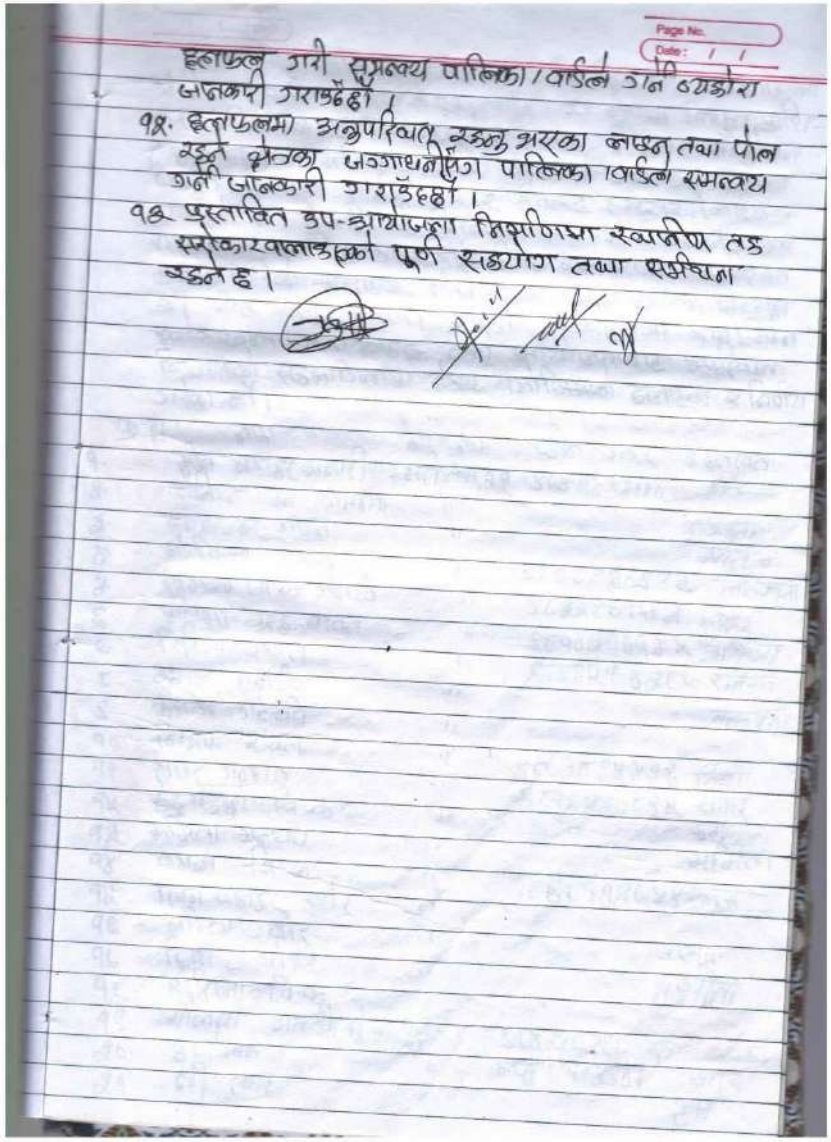
७. आयोजना क्षेत्रमा प्रभावित क्षेत्र दलित, आदिवासी जनजाति समुदायहरुको भरतापति अनुहरुको सामाजिक धार्मिक तथा संस्कृतिमा कुनै नकारात्मक असर नपर्ने हेरिनुपर्ने।

८. यस क्षेत्रको अधिकांश घरधुरी अझै विद्युत आपूर्ति नभएको हुँदा यथाशिघ्र काम थुक गरी सम्भव भएसम्म विद्युत उपलब्ध गराउने।

९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समन्वय गरिने जानकारी गराइयो।

१०. प्रस्तावित क्षेत्र बस्ती। आवागमन। सांस्कृतिक संपदा। संस्कार रहनसहन बारेको जानकारी गराइएको।

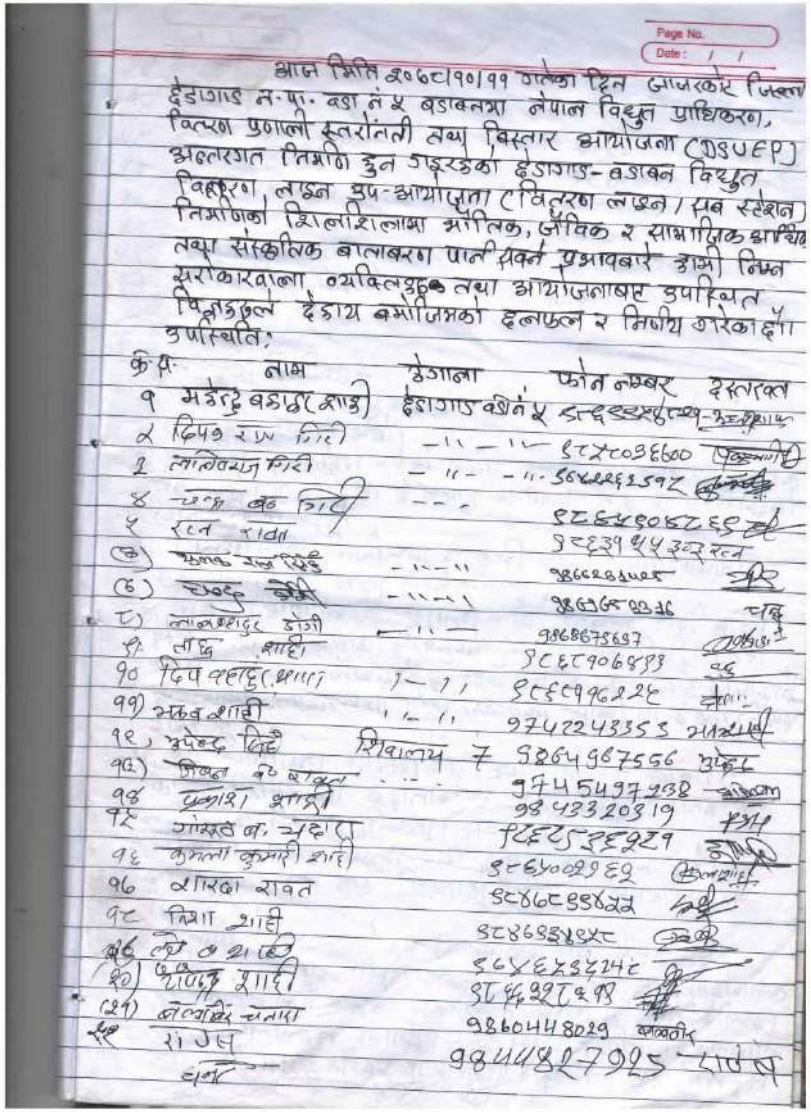
११. प्रस्तावित लाइन निर्माण जग्गाबाट जानुपर्दा अरुमा पनि कुनै समस्या नपर्ने तथा जग्गा धनी सँग



हलफल गरी सुम्पन्य पालिका/वडाले यति व्यहोरा जनाउनु गराएँहौं ।

१४. हलफलमा अनुपस्थित रहेका अरुका लगत्न तथा फोन रहेको भएमा सम्पर्क गर्नेका पालिका/वडाले समन्वय गरी जानकारी गराउनेछौं ।

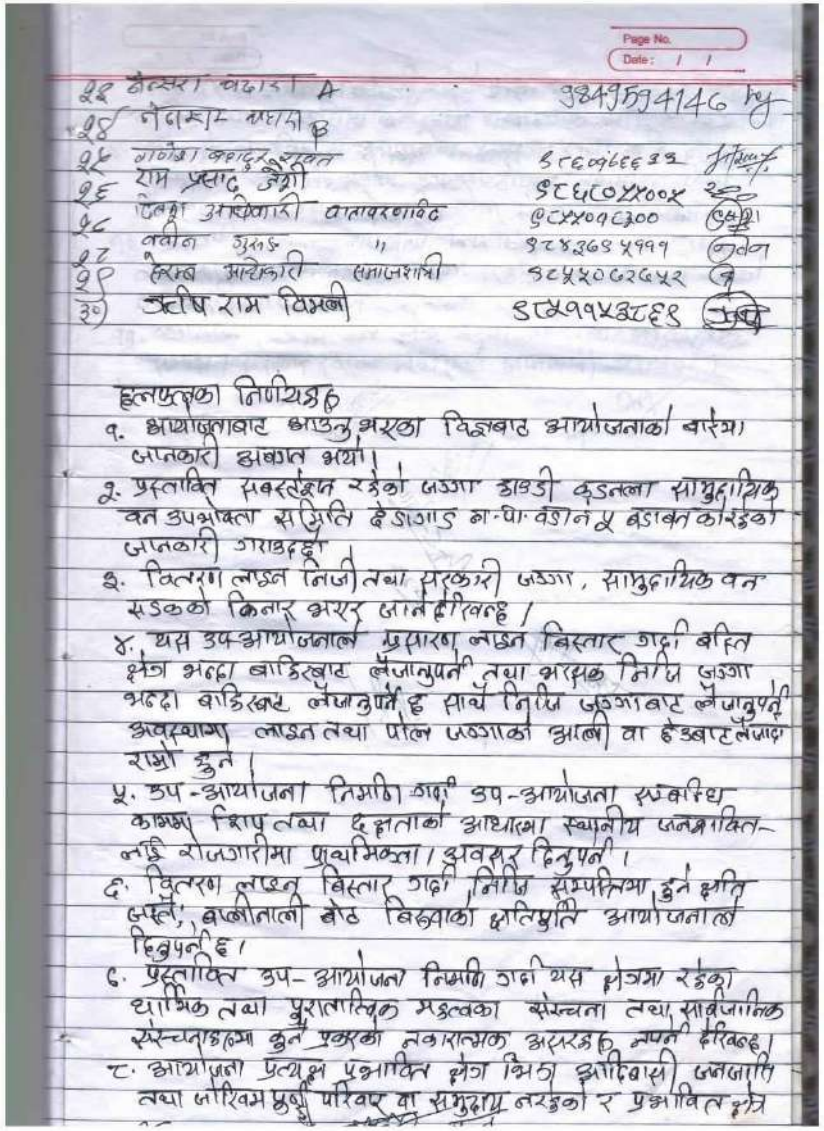
१५ प्रस्तावित उप-आयोजना निर्माणमा स्थानीय तह सरकारवालालाई पूर्ण सहयोग तथा सुविधा गर्नेछौं ।



आज मिति २०८१/१०/११ गतेका दिन आजरकोट जिल्ला हेडागाउ न.पा. वडा नं २ बडाबनमा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तरगत निर्माण हुन गइरहेका हेडागाउ-बडाबन विद्युत वितरण लाइन उप-आयोजना (वितरण लाइन/सब स्टेशन) निर्माणका शिलशिलामा आर्थिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरण पार्ने सक्ने प्रभावबारे जानी निम्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपरिचत विद्यार्थीहरुले हेडाय बमोजिमको हलफल र मिति गरेका हौं।

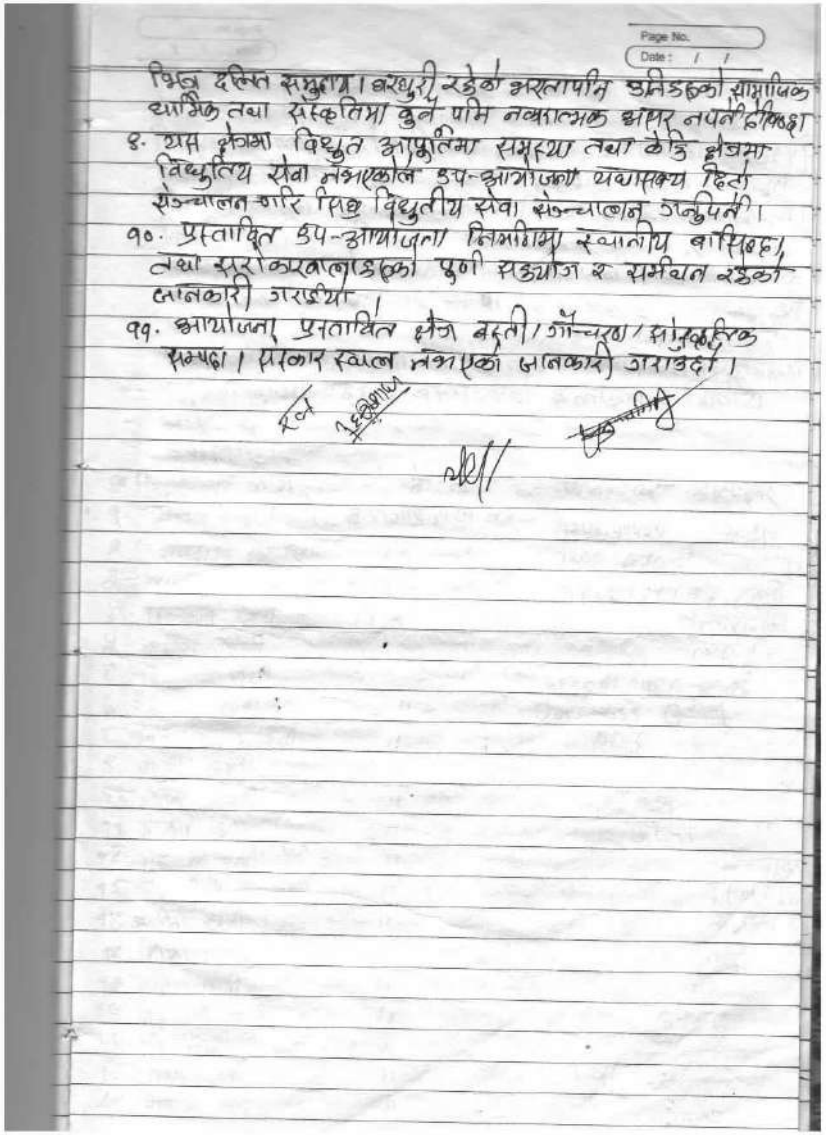
उपस्थिति:

क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	मदन बडाल (आङ्दे)	हेडागाउ वडा नं २		
२	दिपक रञ्जन गिरी	-11-	9CX03E600	
३	लालिबज्र गिरी	-11-	9842263597	
४	चन्द्र बहादुर गिरी	-11-	9CE6Y90BCE9	
५	रत्न राना	-11-	9CE39Y43XX रत्न	
६	[illegible]	-11-11	9862881025	
७	[illegible]	-11-11	9861G6 9316	
८	लालबहादुर डोंगी	-11-	9868675697	
९	लाछु शाही		9CEC906X33	
१०	दिप बहादुर (आगा)	-11-	9CEC996226	
११	अकब शाही	-11-	9742243355	
१२	भुपेन्द्र गिरी	शिवालय 7	9864967556	
१३	गिरुन बि बादल		9745497938	
१४	पुष्कार शाही		9843320319	
१५	गोमत्त बा. चन्दाल		9CE6Y0291E9	
१६	कुमली कुमारी शाही		9CX6CE9X22	
१७	पारिका रावत		9CX69EXXYC	
१८	मिया शाही		9CYEZ3Y24C	
१९	लेपु बा शाही		9CYY29C9B	
२०	पोषन शाही		9860448029	
२१	लोचबिर चनारा		9844827925	
२२	रा जल			

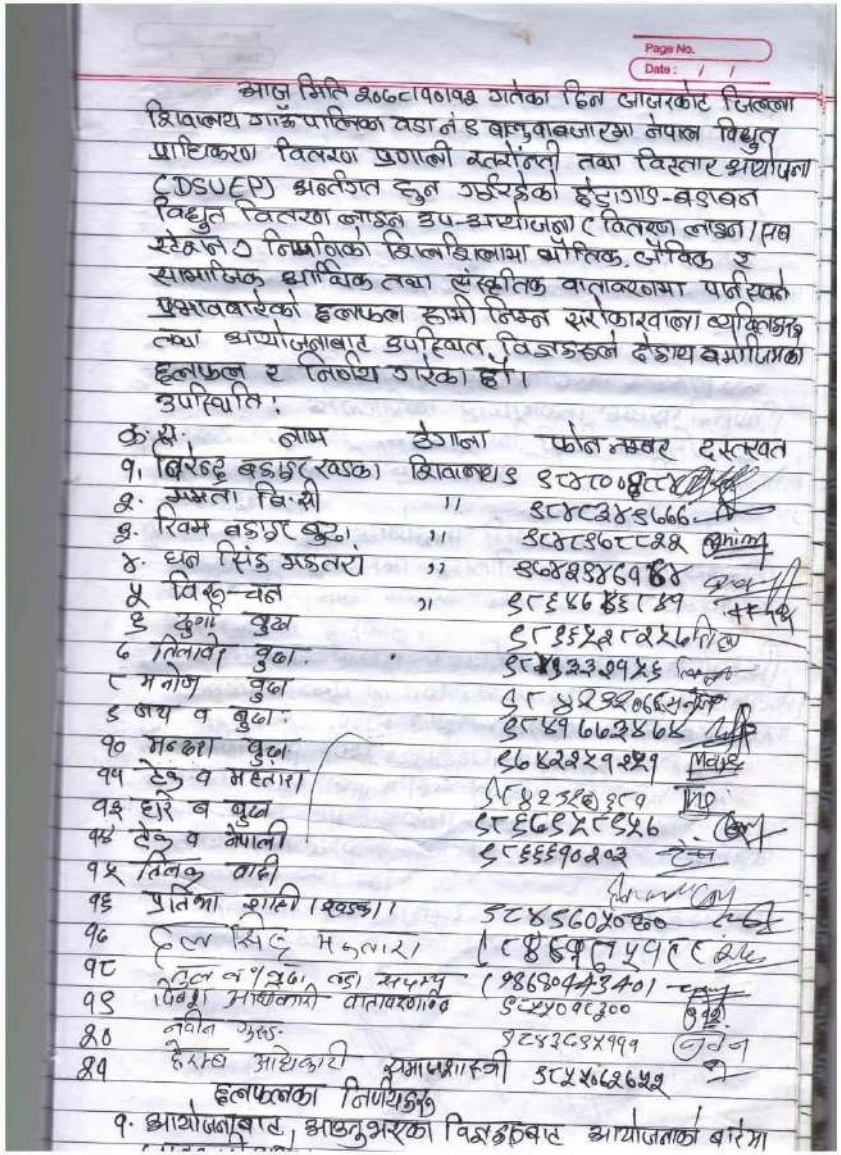


२८ हेल्परा बढादार A 9849594146 by
२९ नेतरम्म बघाई B
२५ गणेश बहादुर रावत
२६ राम प्रसाद जैशी
२८ [illegible] आफिसारी वातावरणविद
२८ नवीन गुरुङ "
२७ [illegible] अधिकारी समाजशास्त्री
३० अतीष राम विम्बो

हस्तक्षेपका विषयहरु
१. आयोजनाबाट आउने असरका विद्युतीय आयोजनाको बारेमा जानकारी आदान भयो।
२. प्रस्तावित सबस्टेशन रहेको जग्गा डाडो कटनका सामुदायिक वन उपभोक्ता समिति छेडागाड वा-पो-वडान ५ बडाबन कार्यको जानकारी गराइएको
३. वितरण लाइन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार भएर जाने हुँदा।
४. यस उप-आयोजनाले प्रसारण लाइन विस्तार गर्दा बत्ति क्षेत्र भएका बाटिरबाट लैजानुपर्ने तथा असरक निजि जग्गा भएका बाटिरबाट लैजानुपर्ने हुँदा सार्वे निजि जग्गाबाट लैजानुपर्ने अवस्थामा लाइन तथा पोल जग्गाको आली वा हेरबाट लैजाने राम्रो हुने।
५. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित काममा स्थानीय दक्षताको आधारमा स्थानीय जनशक्ति-लाई रोजगारीमा प्राथमिकता। अवसर दिनुपर्ने।
६. वितरण लाइन विस्तार गर्दा निजि सम्पत्तिमा हुने क्षति भएमा; बजीनालाई बेठ विरुवाको क्षतिपुर्ति आयोजनाले दिनुपर्ने हुँ।
७. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असरहरु नपर्ने हेरिनुहुन।
८. आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजाति तथा जोखिममा पर्ने परिवार वा समुदाय नरहेको र प्रभावित हुने



भित्र दलित समुदाय। बरबुरी रहेको असरापनि यसिकको सामाजिक धार्मिक तथा संस्कृतिमा कुनै पनि नकारात्मक असर नपर्ने देखिन्छ।
९. यस क्षेत्रमा विद्युत आपुर्तिमा समस्या तथा केही क्षेत्रमा विद्युतिय सेवा नभएकोले उप-आयोजना औचित्यपुर्ण हिर्ने सञ्चालन गरि सिक्ष विद्युतीय सेवा सञ्चालन गर्नुपर्ने।
१०. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा, तथा सरोकारवालाहरुको पुर्ण सहयोग र समर्थन रहेको जानकारी गराईयो।
११. आयोजना प्रस्तावित क्षेत्र बस्ती, गोचरण, सांस्कृतिक सम्पदा। सकार स्थल नभएको जानकारी गराउने।



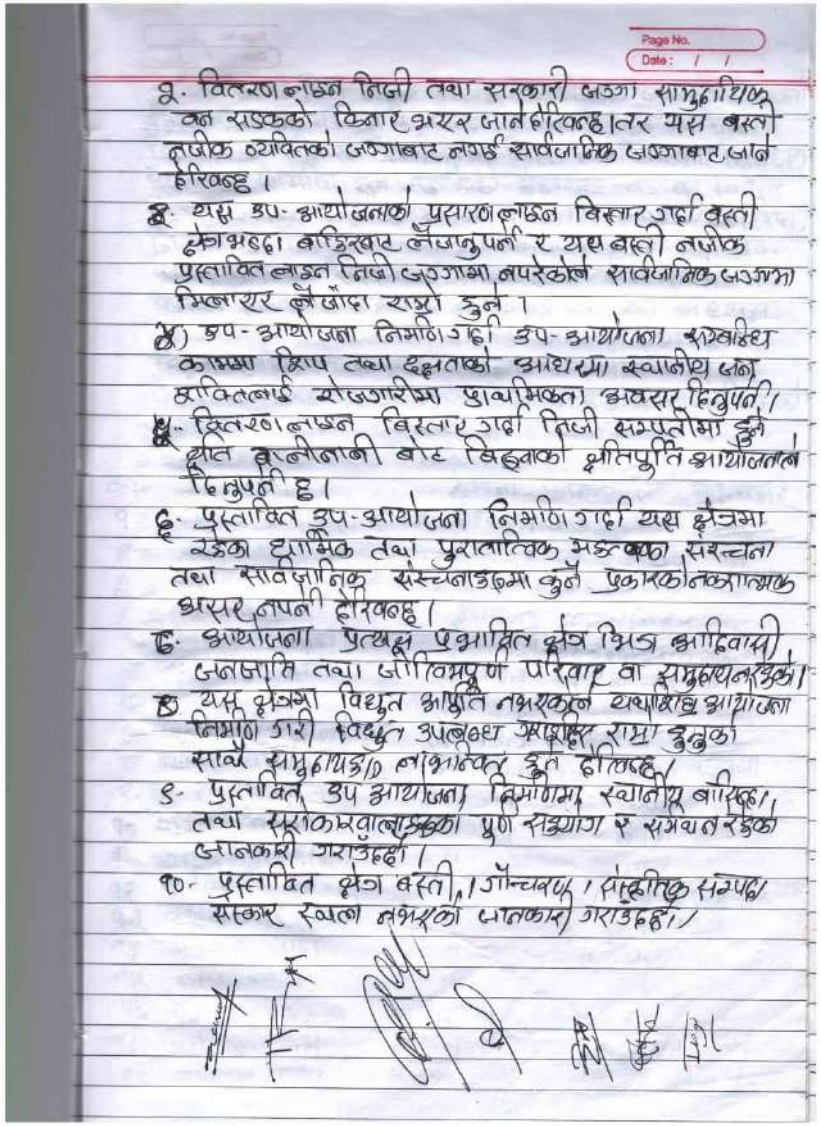
आज मिति २०८८।०७।२८ गतेका दिन जाजरकोट जिल्ला शिवालय गाउँपालिका वडा नं ६ बन्नुबाजारमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत हुन गईरहेको हेटौडा-बडाबन विद्युत वितरण लाइन उप-आयोजना र वितरण लाइन/सब स्टेशन ० निर्माणको सिलसिलामा वातिक, जातिक र सामाजिक धार्मिक तथा संस्कृतिक वातावरणमा पर्नसक्ने प्रभावबारेको छलफल हामी निम्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञहरुले देहाय बमोजिमको छलफल र निर्णय गरेका हौं।

उपस्थिति:

क.सं.	नाम	ठेगाना	फोन नम्बर	दस्तखत
१.	बिरेन्द्र बडुर खड्का	शिवालय ६	९८४८०४८८८४	
२.	सम्झना घि.सी	"	९८४८३४९६६६	
३.	रिवम बडुर खड्का	"	९८४८९०८८२४	
४.	धन सिंह गजतरी	"	९८४२४४८५६४	
५	विरु-चन	"	९८६५८४९८४९	
६	कुमा बुढा		९८४९५२४८२५८	
७	तिलाबो बुढा		९८४२३२३५५६	
८	मनोज बुढा		९८४५२४०६६	
९	जय व बुढा		९८४९५६६४८६	
१०	मन्का बुढा		९८६२२४१४२१	
११	देउ व महतारा		९८४२४९०९८९	
१२	हरे व बुढा		९८६९५८९५२६	
१३	देउ व बैपाली		९८६६६१०२०३	
१४	तिलक बादी			
१५	प्रतिमा शाही (खड्का)		९८४५६०५०६०	
१६	लिला सिंह मल्लारा		९८४६८५५१८८२५	
१७	तुल्सी ५/३६ वडा सदस्य		(९८६९०४५३४०)	
१८	विन्दा मार्फतमा वातावरणविद		९८४५०९८५००	
१९	नवीन फुल्स		९८४२८९४९९९	
२०	हरिप्रसाद आधिकारी		९८४५६२६५५२	
२१				

छलफलका निर्णयहरु

१. आयोजनाबाट, आसपुरका विज्ञहरुबाट आयोजनाको बारेमा



२. वितरण लाइन निजी तथा सरकारी जग्गा सामुदायिक वन सडकको किनार भएर जाने हुँदा कुनै पनि बस्ती नजिक व्यक्तिको जग्गाबाट नगई सार्वजनिक जग्गाबाट जाने हुँदा छ।

३. यस उप-आयोजनाको प्रसारण लाइन विस्तार गर्दा बस्ती कम भएको, बढिखाट जोडजानुपर्ने र यस बस्ती नजिक प्रस्तावित लाइन निजी जग्गामा नपरेकोले सार्वजनिक जग्गामा मिलाएर जोडा राख्नु हुने।

४) उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित कामका किसिम तथा दक्षताको आधारमा स्थानीय जन शक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।

५. वितरण लाइन विस्तार गर्दा निजी सम्पत्तीमा हुने क्षति बापतको बाली बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।

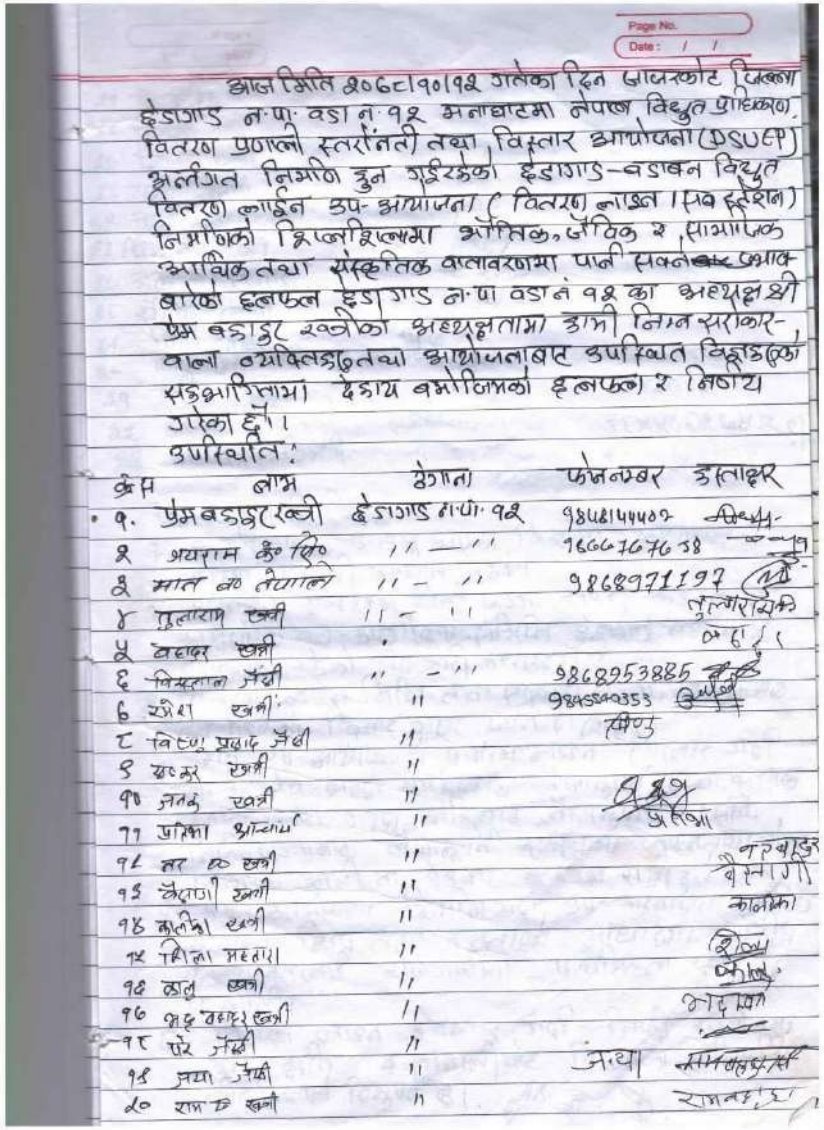
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनालाई कुनै प्रकारको नकारात्मक असर नपर्ने हेर्नुपर्ने छ।

७. आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजाति तथा जातिविशेष परिवार वा समुदाय नरहेको।

८ यस क्षेत्रमा विद्युत आपूर्ति नभएकाले यथासीघ्र आयोजना निर्माण गरी विद्युत उपलब्ध गराइनुपर्ने राय सुझाव सबै समुदायबाट व्यक्त हुन आएको छ।

९. प्रस्तावित उप आयोजना निर्माणमा स्थानीय बासिन्दा, तथा सरोकारवालाहरुको पूर्ण सहयोग र समन्वय रहने जानकारी गराउनुहुने।

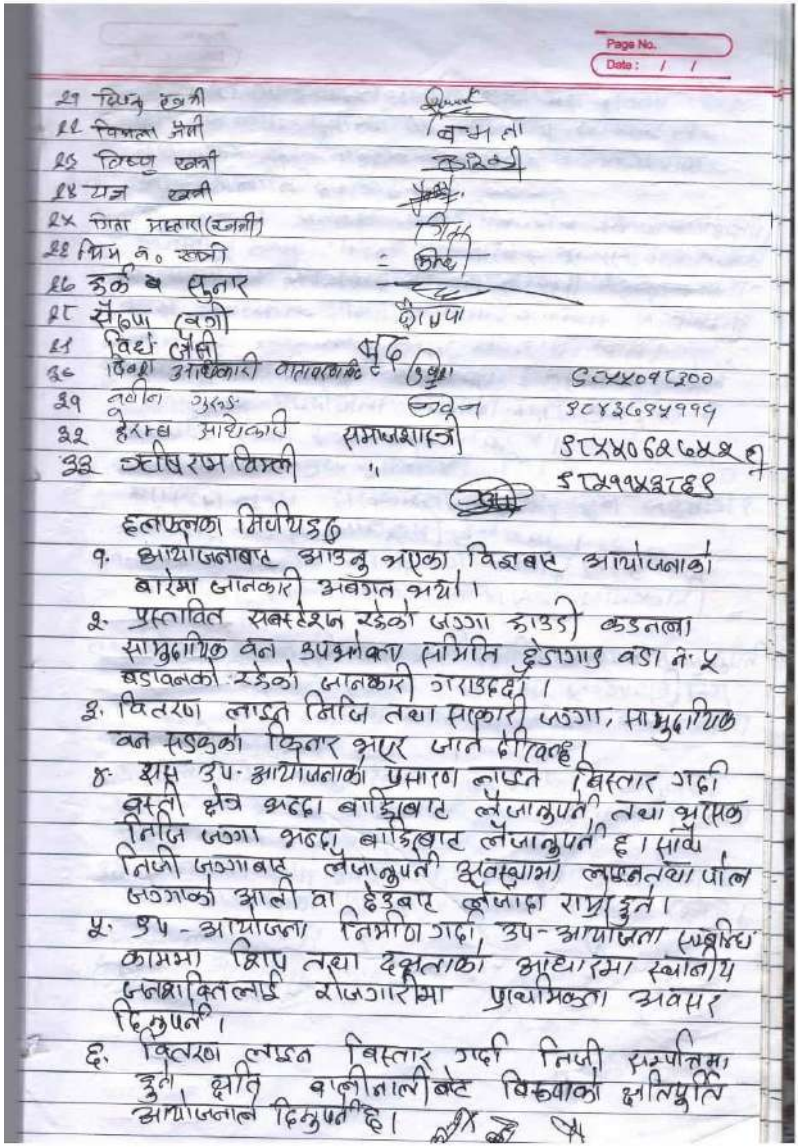
१०. प्रस्तावित क्षेत्र बस्ती, गौचरण, सांस्कृतिक सम्पदा संरक्षण सम्बन्धी जानकारी गराउनुहुने।



आज मिति २०८८।७।१२ गतेका दिन जावरकोट चिल्ला छेडागाड न.पा. वडा नं. १२ मनाघाटमा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अर्न्तगत निर्माण हुन गईरहेको छेडागाड-वडाबन विद्युत वितरण लाईन उप-आयोजना (वितरण लाइन। सब स्टेशन) निर्माणको क्रियाकलापमा आर्थिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पार्ने सकनेजस्ता बारेमा छलफल छेडागाड न.पा. वडा नं १२ का अध्यक्षश्री प्रेम बडाडुर रक्तीको अध्यक्षतामा डाकी निम्न सरोकार-वाला व्यक्तिहरुसंग आयोजनाबारे उपस्थित विद्वाहरुको सङ्गतिमा देहाय बमोजिमको छलफल र निर्णय गरिएको हुँ।

उपस्थिति:

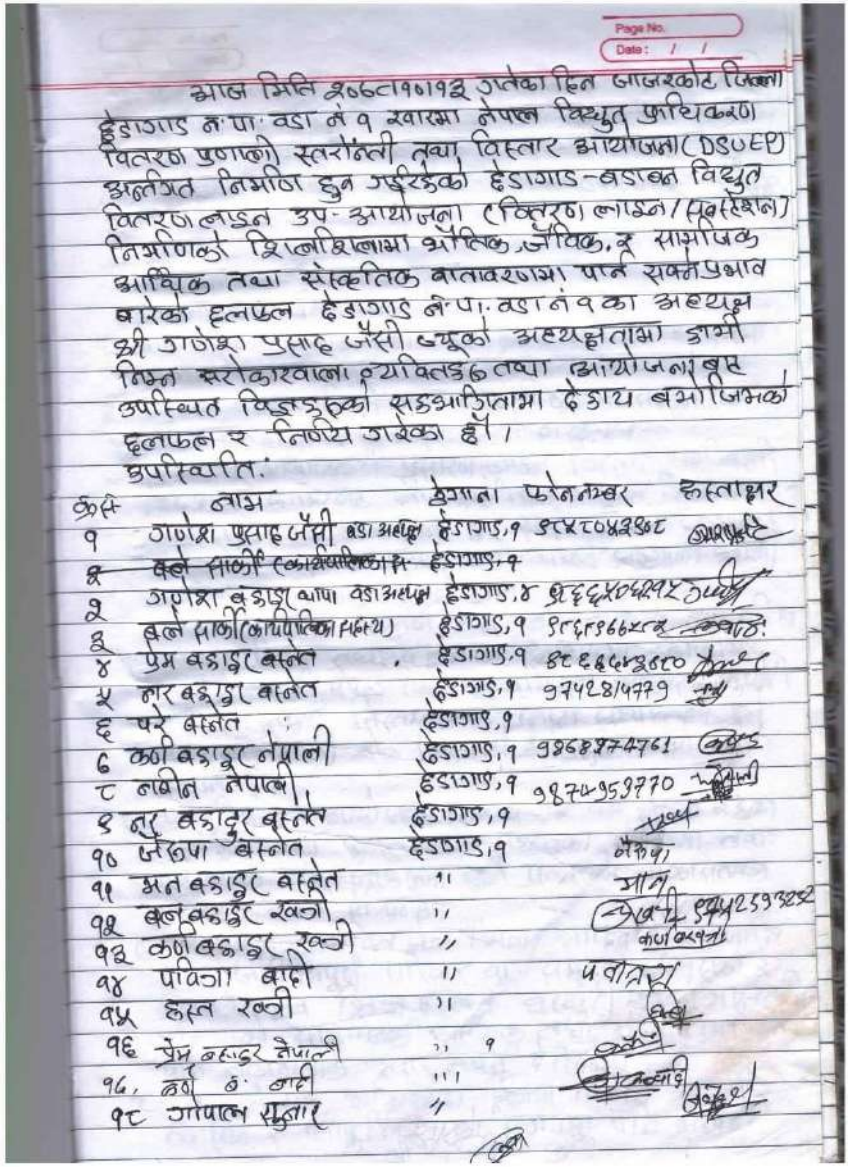
क्रम	नाम	ठेगाना	फोननम्बर	हस्ताक्षर
१.	प्रेम बडाडुर रक्ती	छेडागाड न.पा. १२	९४८१५५५०२	
२	श्यराम कँ० छि०	,, — ,,	९८८८७८७८३८	
३	मात ब० नेपाली	,, — ,,	९८८९७११९७	
४	पुतनाराम रक्ती	,, — ,,		
५	बहादुर रक्ती	,, — ,,		
६	विश्वलाल जैसी	,, — ,,	९८८९५३८८५	
७	रौशन रक्ती	,,	९८८५५०३५३	
८	विष्णु प्रसाद जैसी	,,		
९	ठाकुर रक्ती	,,		
१०	जनक रक्ती	,,		
११	जमिका आचार्य	,,		
१२	नर ब० रक्ती	,,		
१३	कैलाशी रक्ती	,,		
१४	कल्पना रक्ती	,,		
१५	पविता महतारा	,,		
१६	लालु रक्ती	,,		
१७	शङ्कर बहादुर रक्ती	,,		
१८	धरे जैसी	,,		
१९	प्रभा जैसी	,,		
२०	राम ब० रक्ती	,,		



२१	विष्णु रक्ती		
२२	विमला जैसी		
२३	विष्णु रक्ती		
२४	यज्ञ रक्ती		
२५	गीता महतारा (रक्ती)		
२६	विमल ब० रक्ती		
२७	डुर्के ब सुनार		
२८	सैजुण (रक्ती)		
२९	विर्धा जैसी		
३०	विभा आचार्य		९८४४०४८३००
३१	नवीन गुरुङ		९८४३८४४९९९
३२	हरिभद्र आचार्य	समाजशास्त्री	९८४४०६२८५४२
३३	ऋषिराम विसी		९८४९९४२८६९

छलफलका निर्णयहरु

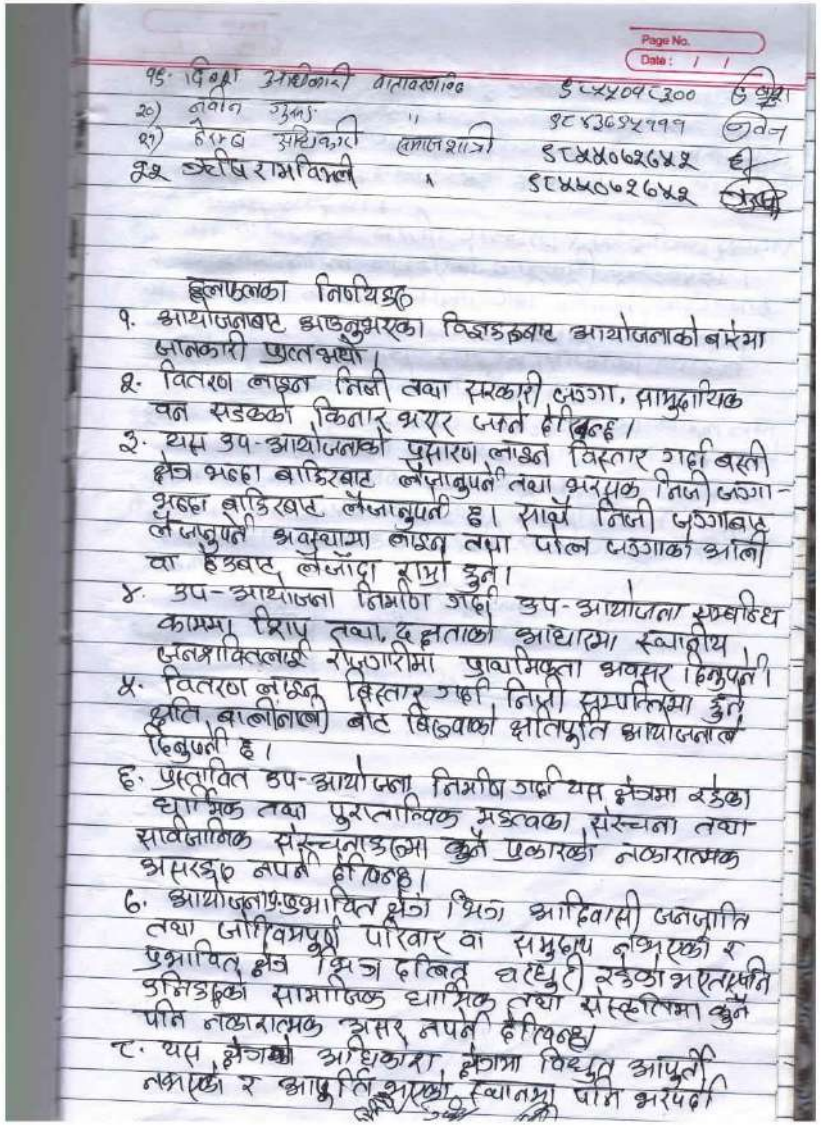
१. आयोजनाबारे आउनु भएका विद्वहरु आयोजनाको बारेमा जानकारी अवगत गर्नु।
२. प्रस्तावित सबस्टेशन रहेको जग्गा डाडो कटनका सामुदायिक वन उपभोक्ता समिति छेडागाड वडा नं. ५ बडाबनको रहेको जानकारी गराइएको।
३. वितरण लाइन निजि तथा सार्वजनिक जग्गा, सामुदायिक वन सडकको किनार भएर जाने हुँदा।
४. साथै उप-आयोजनाको प्रभावित लाइन विस्तार गर्दा बस्ती क्षेत्र भएका बाहिरबाट लैजानुपर्ने तथा आवश्यक निजि जग्गा भएका बाहिरबाट लैजानुपर्ने हुँ। साथै निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाइन तथा पोल जग्गाको आली वा हेडबाट लैजाने राय दिनुहुने।
५. उप-आयोजना निर्माण गर्दा, उप-आयोजना सम्बन्धि कामका किसिम तथा दक्षताका आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।
६. वितरण लाइन विस्तार गर्दा निजी सम्पत्तिमा हुने क्षति बापतको नगदमा क्षतिपूर्ति आयोजनाले दिनुपर्ने हुँ।



आज मिति २०८८।१०।१४ गतेका दिन जाजरकोट जिल्ला हेडागाउ न.पा. वडा नं ९ स्थानमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको हेडागाउ-बडाबन विद्युत वितरण लाइन उप-आयोजना (वितरण लाइन/सबस्टेशन) निर्माणको सिलसिलामा आर्थिक, जैविक, र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्न सक्ने प्रभाव बारेको छलफल हेडागाउ न.पा. वडा नं ९ का अध्यक्ष श्री गणेश प्रसाद जैसी ज्यूको अध्यक्षतामा डार्मी निम्न स्टेकहोल्डरहरु उपस्थित विद्युतिकरणको सडआउटलाइनमा हेडाय बस्तीजिमको छलफल र निर्णय गरेका हौं।

उपस्थिति:

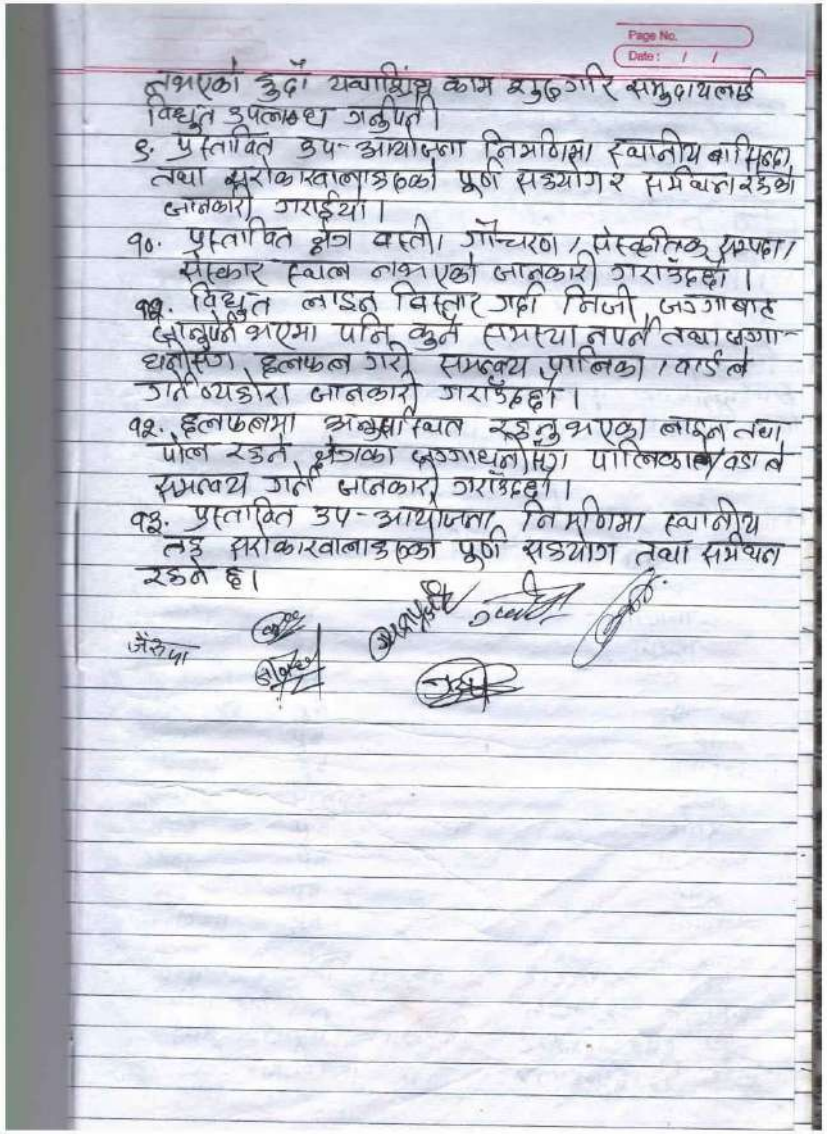
क्रम	नाम	ठेगाना	फोननम्बर	हस्ताक्षर
१	गणेश प्रसाद जैसी वडा अध्यक्ष	हेडागाउ, ९	९८४८०४३३०८	
२	~~बल्ल माली (कार्यपालिका सदस्य)~~	हेडागाउ, ९		
२	गणेश बडाइ (बाघा) वडा अध्यक्ष	हेडागाउ, ४	९८६९४०६५१२	
३	बल्ल माली (कार्यपालिका सदस्य)	हेडागाउ, ९	९८६१९६६८२	
४	प्रेम बडाइ बस्नेत	हेडागाउ, ९	९८६८६७३८८०	
५	नर बडाइ बस्नेत	हेडागाउ, ९	९७४२८।५४७९	
६	धरे बस्नेत	हेडागाउ, ९		
७	कर्णी बडाइ नेपाली	हेडागाउ, ९	९९८६९२७४७८१	
८	नवीन नेपाली	हेडागाउ, ९	९८७४९५९७७०	
९	नूर बडादुर बस्नेत	हेडागाउ, ९		
१०	जेठपा बस्नेत	हेडागाउ, ९		
११	मन बडाइ बस्नेत	,,		
१२	बलु बडाइ खत्री	,,		९७५२५३९२९
१३	कर्ण बडाइ खत्री	,,		
१४	पविता बादी	,,		
१५	हस्त खत्री	,,		
१६	प्रेम बहादुर नेपाली	,,		
१७	कर्ण ढं. नारी	,,,		
१८	गोपाल सुनार	,,		



१९	विष्णु अधिकारी	वातावरणविद	९८४४०४८३००
२०	नवीन गुरुङ	,,	९८४३६९४९९९
२१	हेरुङ	अधिकारी कानुनशाखा	९८४४०६२६४२
२२	ऋषिराम विष्टी	,,	९८४४०६२६४२

छलफलका निर्णयहरु

१. आयोजनाबारे आजुधुरुका विद्युतिकरण आयोजनाको बारेमा जानकारी प्रस्तुत भयो।
२. वितरण लाइन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकका किनार भएर जाने हो छलफल।
३. यस उप-आयोजनाको प्रसारण लाइन विस्तार गर्दा बस्ती क्षेत्र भएका बाटिरबाट लैजानुपर्ने तथा अरुका निजी जग्गा-भुक्ता बाटिरबाट लैजानुपर्ने छ। साथै निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाइन तथा पोल जग्गाको आली वा हेडबाट लैजाँदा राम्रो हुने।
४. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित काममा श्रिपु तथा, छलफलको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।
५. वितरण लाइन विस्तार गर्दा निम्नी सम्पत्तिमा हुने क्षति, बालीनालीको बेट बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असरहरु नपर्ने हो छ।
७. आयोजनाबाट प्रभावित हुने दलित आदिवासी जनजाति तथा जोखिममुखी परिवार वा समुदाय पहिचान र प्रभावित क्षेत्र भित्र दलित चल्चुरी रहेका अन्तर्क्रिया समितिको सामाजिक धार्मिक तथा सांस्कृतिमा कुनै पनि नकारात्मक असर नपर्ने हो छ।
८. यस क्षेत्रको अधिकारा, क्षेत्रमा विद्युत आपूर्ती नकाको र आपूर्ति भएको क्षेत्रमा पनि भरपर्दो



Page No.
Date : / /

भएको छैन यसतर्फ काम गुठागरि सम्बन्धित समुदायलाई विद्युत उपलब्ध गराउने।

९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समन्वय रहेको जानकारी गराईयो।

१०. प्रस्तावित हुने वस्ती, गोचरण, सांस्कृतिक सम्पदा, सरकार स्वामित्व भएको जानकारी गराउनुहुने।

११. विद्युत लाइन विस्तार गर्दा निजी जग्गाबाट जानुपर्ने भएमा पनि कुनै समस्या नपर्ने तथा जग्गा धनीसँग इलफल गरी सम्झौता पत्रिका / वाईल गर्ने व्यहोरा जानकारी गराउनुहुने।

१२. इलफलमा असहमति रहेनु भएको लाइन तथा पोल रहने, क्षतिका क्षतिपूर्ति हुने, पत्रिकाबाट समन्वय गर्ने जानकारी गराउनुहुने।

१३. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय तह सरोकारवालाहरुको पूर्ण सहयोग तथा समन्वय रहने छ।

जैसेथा

Annex 6: DEED OF ENQUIRY (MUCHULKAS)

शिवालय गाउँपालिका
...१.. नं. वडा कार्यालय
काफलगैरि, डोल्पा
कर्णाली प्रदेश, नेपाल

पत्र संख्या :२०७८/०७२
चलानी नं. : ६२५

मिति : २०७८।१०।१३

विषय : जानकारी सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण
वितरण तथा ग्राहक सेवा
तिर्इखानालय

उपरोक्त विषयमा रुरियन इन्फ्रास्ट्रक्चर डेभलपमेन्ट बैंक (रु. आई. आई. बि.) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा तिर्इखानालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (रु. आई. आई. बि.) प्रस्तावक रही कार्यान्वयन गर्ने जाजिरकोट हेडाउ विद्युत वितरण लाइन सम्बन्धमा प्रभावित स्थानमा गठन भएको जानकारी प्राप्त भएको व्यहोरा जानकारीको लागि अनुरोध छ।

मान बहादुर पुन मगर
वडा अध्यक्ष

शिवालय गाउँपालिका

....१. नं. वडा कार्यालय

कर्णाली प्रदेश, नेपाल

पत्र संख्या : २०८०७०८३

चलानी नं. : ६३५

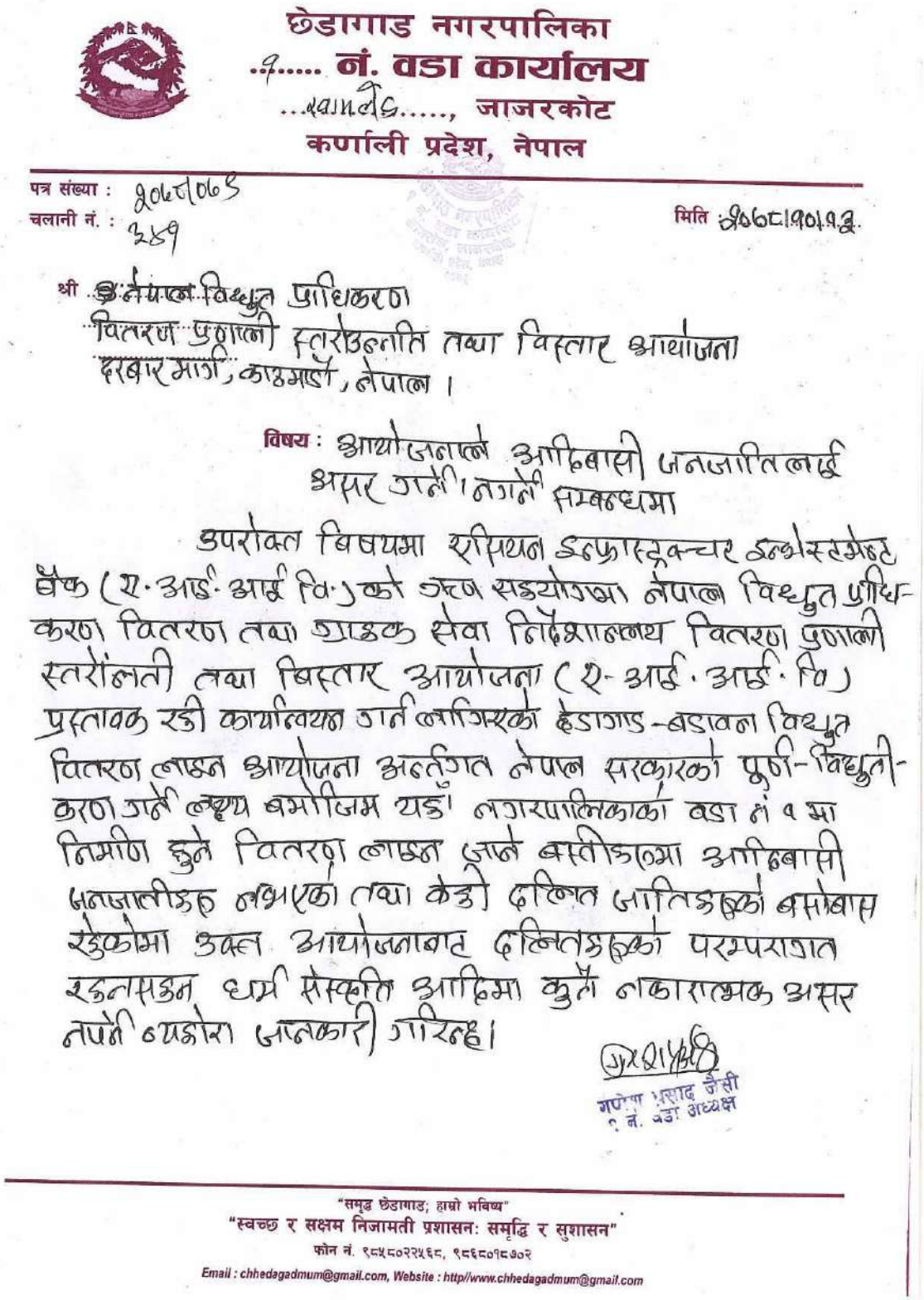
मिति : २०८०१०१७६

विषय : आयोजनाले आदिवासी जनजातीलाई असर गर्ने बारे सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना
दरबारमार्ग, काठमाडौं, नेपाल

उपरोक्त विषयमा वर्ल्ड बैंक (इ. आई. आई. वि.) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना इ. आई. आई. वि. प्रस्तावक रहि कार्यान्वयन गर्ने लागिएको हेटौंडा-बर्दघाट विद्युत वितरण लाइन आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम यहाँ आउँने-पालिकाको वडा नं १ मा निर्माण हुने वितरण लाइन जाने बस्तीहरुमा आदिवासी जनजातिहरुको बसोबास रहेको भएतापनि उक्त आयोजनाले आ. जनजातिहरुको परम्परागत रहन-सहन धर्म, संस्कृति आदिमा कुनै नकारात्मक असर नपर्ने व्यहोरा जानकारीको लागि अनुरोध छ

मनबहादुर पुन मगर
वडा अध्यक्ष



छेडागाड नगरपालिका
९..... नं. वडा कार्यालय
...खाम्लेउ....., जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या : २०८१/०८९
चलानी नं. : ३८१

मिति २०८८।०१।१३.

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना
दरबार मार्ग, काठमाडौं, नेपाल ।

विषय : आयोजनाले आदिवासी जनजातिलाई असर गर्ने/नगर्ने सम्बन्धमा

उपरोक्त विषयमा एसियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए.आई.आई बि.) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालयद्वारा वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना (ए.आई.आई.बि) प्रस्तावक रही कार्यान्वयन गर्ने लागिएको छेडागाड-बडावन विद्युत वितरण लाइन आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम यस नगरपालिकाका वडा नं ९ मा निर्माण हुने वितरण लाइन जाने बस्तीकाममा आदिवासी जनजातीहरु नभएको तथा केही दलित जातिहरुको बसोबास रहेकोमा उक्त आयोजनाबाट दलितहरुको परम्परागत रहनसहन धर्म संस्कृति आदिमा कुनै नकारात्मक असर नपर्ने यहाँहरु जानकारी गरिन्छ।

गणेश प्रसाद जैसी
९ नं. वडा अध्यक्ष

"समृद्ध छेडागाड; हाम्रो भविष्य"
"स्वच्छ र सक्षम निजामती प्रशासन: समृद्धि र सुशासन"
फोन नं. ९८५८०२२५६८, ९८६८०१८७०२
Email : chhedagadmum@gmail.com, Website : http//www.chhedagadmum@gmail.com

छेडागाड नगरपालिका
९..... नं. वडा कार्यालय
.....खोलाचौर....., जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या : २०८१/०६९
चलानी नं. : ३४०
मिति : २०८१/०१/१९

श्री ....नेपाल....विद्युत....प्राधिकरण
वितरण तथा ग्राहक सेवा निर्देशनालय
.....

विषय : जानकारी सम्बन्धमा ।

उपरोक्त सम्बन्धमा यो शाखाबाट ~~कन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट फण्ड(ए.आई.एफ)~~ को रकम सदुपयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय वितरण तथा ग्राहक सेवा ~~निर्देशनालय~~ वितरण प्रणाली, सुदृढीकरण तथा विस्तार आयोजना प्रस्तावक रही कार्यान्वयन गर्न लागिरहेको छेडागाड वडास्तर विद्युत वितरण लाइन सम्बन्धमा गुनासो समाधान संयन्त्र गठन भएको जानकारी प्राप्त भएको व्यहोरा अनुरोध गरिन्छ ।

गणेश प्रसाद जैती
९ नं. वडा अध्यक्ष

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
१२ नं. वडा कार्यालय
जाजरकोट
१२ नं. कर्णाली प्रदेश, नेपाल

पत्र संख्या २०८२०८३
चलानी नं. ३०२

मिति :२०८८।१०।१२

विषय : उजुरी समाधान संयन्त्र गठन भएको जानकारी प्राप्त सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना
हरबारमाण, काठमाडौं, नेपाल ।

उपरोक्त सम्बन्धमा त्यस कार्यालयको च.नं १३८ मिति २०७८।१०।०६ गतेको पत्र अनुसार प्रस्तावित वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजनाको उजुरी समाधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराउदछु ।

प्रेम बहादुर रुक्मी
वडा अध्यक्ष

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
वडा नं. १२ वडा कार्यालय
पो.ब्य. जाजरकोट
१२ कर्णाली प्रदेश, नेपाल

पत्र संख्या ४०८।०६९
चलानी नं. ३०१

मिति : २०८८।१०।१९

विषय : सुचना टॉस गरिएको सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना
दरबारमार्ग, काठमाडौं, नेपाल।

उपरोक्त सम्बन्धमा त्यस कम्पनीको मिति २०८८।१०।०६ को प्राप्त पत्रानुसार कर्णाली प्रदेश। जाजरकोट जिल्ला छेडागाड नगरपालिका १२ नंम्बर वडामा नेपाल विद्युत प्राधिकरणद्वारा प्रस्तावित वितरण प्रणाली स्तर-उन्नति तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social management plan) प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सुचना यस कर्णाली प्रदेश। जाजरकोट जिल्ला। छेडागाड नगरपालिका। वडा नं १२ मा अवस्थित यस १२ नम्बर वडा कार्यालयको सुचना पाटी मा २०८८।१०।१९ गते टॉस गरिएको व्यहोरा जानकारीका लागि अनुरोध छ।

प्रेम बहादुर रक्सी
वडा अध्यक्ष

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
नं. वडा कार्यालय
जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या ०७८।०७९
चलानी नं. ३०२.

मिति :२०७८।१०।१९

विषय : आयोजनाले आदिवासी जनजातिलाई असर गर्ने/नगर्ने सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना
दरबारमार्ग, काठमाडौं, नेपाल।

उपरोक्त विषयमा, एसियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए. आई. आई. बि.) को ऋण सहायतामा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय वितरण प्रणाली स्तरउन्नती तथा विस्तार आयोजना (ए. आई. आई. बि) प्रस्तावक रही कार्यान्वयन गर्ने जिम्मेवारी छेडागाड-बडावन विद्युत वितरण लाइन आयोजना अर्न्तगत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य सम्बोधन गर्न नगरपालिकाको वडा नं १९ मा निर्माण हुने वितरण लाइन जाने बस्तीहरुमा आदिवासी जनजातिहरु नभएकोले यस वडाका केही दलित जातिहरुको बसोबास रहेकोमा उक्त आयोजनाबाट ती दलितहरुको परम्परागत रुढी-संस्कृति धर्म, संस्कृति आदिमा कुनै नकारात्मक असर नपर्ने व्यहोरा जानकारी गरिन्छ।

धन्यवाद।
प्रेम बडाईत रावत
वडा अध्यक्ष

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
कार्कीगाउँ, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या : - ०७७।०७८ मिति :- २०७८।१०।११

चलानी नं :- 9900

श्री नेपाल विद्युत प्राधिकरण
वितरण तथा ग्राहक सेवा निर्देशनालय।

विषय :- जानकारी सम्वन्धमा ।

उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्वेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ए.आई.आई.बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको छेडागाड वडावन विद्युत वितरण लाइन सम्बन्धमा गुनासो समाधान संयन्त्र गठन भएको जानकारी प्राप्त भएको व्यहोरा अनुरोध गरिन्छ।

गंग बहादुर रोकाय
निमित्त प्रमुख प्रशासकीय अधिकृत

गंग बहादुर रोकाय
नि. प्रमुख प्रशासकीय अधिकृत

"सुन्दर र समृद्ध छेडागाड हाम्रो भविष्य"
"निजामती सेवाको प्रतिबद्धता–पारदर्शिता र चुस्तता"
फोन नं. ..... फ्याक्स .....
ईमेल :chhedagadmun@gmail.com, वेभसाइट : Http//www.chhedagadmun.gov.np

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
नगरपालिका कार्यालय
छेडागाड कार्यालय, सुरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या २०८०।०८९
चलानी नं. ४८६

मिति :२०८०।१०।०९

विषय :गुनासो समाधान संयन्त्र गठन भएको जानकारी प्राप्त सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना
दरबारमार्ग, काठमाण्डौं, नेपाल।

उपरोक्त सम्बन्धमा त्यस कार्यालयको च.नं. ०८०।०८९-९३८ मिति २०८०।१०।०८ गर्नुको पत्र अनुसार प्रस्तावित वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना को गुनासो समाधान संयन्त्र गठन भएको जानकारी प्राप्त भएको जानकारी गराइदछ।

दिपक राज गिरी
बडा सचिव

दिपक राज गिरी
बडा सचिव

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
वडा कार्यालय
वडा नं. ०४ कार्यालय कोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या :- २०८१/०८९
चलानी नं. ४८६.

मिति :- २०८१/१०/०९

विषय : सूचना टाँस गरिएको सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना
हरबारमार्ग, काठमाण्डौं, नेपाल।

उपरोक्त सम्बन्धमा यस कार्यालयको मिति २०८१/१०/०६ को प्राप्त पत्रानुसार कर्णाली प्रदेश सरकार जिल्ला हेडगाड नगरपालिका ०४ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना को- वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and social management plan) प्रतिवेदन तयारी सम्बन्धी खानेपानि सूचना यस कार्यालय कर्णाली प्रदेश सरकार जिल्ला हेडगाड नगरपालिका वडा नं. ०४ मा अवस्थित यस ०४ नं. वडा कार्यालय को सूचना पाटिमा २०८१।१०।०९ गते टाँस गरिएको व्यहोरा जानकारीका लागि अनुरोध छ।

दिपक राज गिरी
वडा सचिव
दिपक राज गिरी
वडा सचिव

छेडागाड नगरपालिका
नगर कार्यपालिकाको कार्यालय
०२ नं. वडा कार्यालय
वडापत्र, जनरल स्टाट कार्यालय
कर्णाली प्रदेश नेपाल गाजरकोट प्रदेश, नेपाल

पत्र संख्या २०८८/०८९
चलानी नं. ४८८

मिति :२०८८/१०/०९

विषय : आयोजना को आदिवासी जनजातिलाई अवसर गर्ने/नगर्ने सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण
वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना
दरबारमार्ग, काठमाण्डौं, नेपाल।

उपरोक्त विषयमा एसियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोग मा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ए.आई.आई बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको छेडागाड-वडापत्र विद्युत वितरणलाइन आयोजना अन्तर्गत नेपाल सरकारको पुर्ण-विद्युतीकरण गर्ने लक्ष बमोजिम यहाँ नगरपालिका को २ नं. वडामा निर्माण हुने यस प्रदेश तथा जिल्लाका साने वाल्मिकिका आदिवासी जनजातिहरु नजाको तथा सेही दलित जातिहरुको बसोबास रहेकोमा उक्त आयोजना बाट दलितहरुको परम्परागत रहन-सहन धर्म, भाषा संस्कृति आदिमा कुनै नकारात्मक असर नपर्ने देखिएको जानकारी गरिदछु।

दिपक राज गिरी
वडा सचिव

दिपक राज गिरी
वडा सचिव

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, सान्नी जिल्ला, हुमला गापा/नपा २ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित **"बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना"** को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) **प्रतिबेदन तयारी** सम्बन्धि सार्वजनिक सूचना यस सान्नी जिल्ला हुमला गाउँ/नगर पालिका वार्ड नं २, कलिकास्थान मा आज २०७८/१०/०९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	प्रकाश साउँ	हुमला गा.पा.२	व्यवसाय	९८४१६८०८५	
२	जयकुमार रावत	"	कृषि	९७४८८६०६७	
३	मङ्गेश बुढा	"	विद्यार्थी	९८४३२६१४३९	नेकुरा
४	मितेसा चुहारा	"	व्यवसाय	९८४२६९७९०९	
५					
६					
७					
८					
९					

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, छेडागाड गापा/नपा ९ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) **प्रतिबेदन** तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला छेडागाड गाउँ/नगर पालिका वार्ड नं ९ भनाघाट मा आज २०७८/१०/१९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	प्रेम बं खत्री	ई ने गा ९	रामजेवन	९८५४१५५५	
२	विष्णु प्र० जैसी	" "	कृषी		बिष्णु प्रसाद जैसी
३	शंकर खत्री	" "	कृषी		
४	विकलान जैसी	" "	शिक्षक	९८४९५३८८५	
५	दिपक खत्री	" "	कृषी		
६	प्रेम बं खत्री	" "	विद्यार्थी		
७	जय राम के सी	" "	" "		

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, छेडागाड गापा/नपा ९ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला छेडागाड गाउँ/नगर पालिका वार्ड नं ९, रुवारा मा आज २०७८।१०।१२ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	गणेश प्रसाद रोकी	छे. गा. पा. ९	पेशा ब्यबसाय	9858053108	
२	गणेश बहादुर रावल	"	पेशा ब्यबसाय	9848108181	
३	बलबहादुर रोकी	"	स्थानीय	9742693232	
४	विष्णु प्रसाद रोकी	"	"	9868878110	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, सानरकोट जिल्ला, शिवालय गापा/नपा ९ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) **प्रतिबेदन तयारी** सम्बन्धि सार्वजनिक सूचना यस सानरकोट जिल्ला शिवालय गाउँ/नगर पालिका वार्ड नं ९, सालघारी मा आज २०७८.१२.१९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	मानबहादुर पुन	शिवालय - ९	वडा अध्यक्ष	९८६८५४२९६३	
२	वीर बहादुर पुन	"	स्थानीय		
३	देउ बहादुर पुन	"	स्थानीय	९८६९५४३५३०	
४	चन्द्र बहादुर पुन	"	स्थानीय		
५	मानबहादुर पुन	"	"	९८६९८६९२९५	
६	रबिन	पुत		९८७२६२७३८५	Rabi

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

.....प्रदेश, ...जिल्ला, ...गापा/नपा .....वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस _____ जिल्ला _____ गाउँ/नगर पालिका वार्ड नं _____, _____ मा आज २०७८/१२/१९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

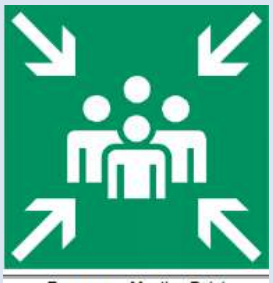
क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१)	विनोद कुमार [illegible]	[illegible]	[illegible]	[illegible]	
२)	[illegible]	[illegible]	[illegible]	[illegible]	
३)	[illegible]	[illegible]	[illegible]	[illegible]	
४)	[illegible]	[illegible]	[illegible]	[illegible]	

Annex 7: SAFETY RELATED SIGNS AND WASTE MANAGEMENT PRACTICES

SIGNAL NOTICE



First Aid
प्राथमिक उपचार



Emergency Meeting Point
आकस्मिक भेला हुने ठाउँ



Fire Extinguisher
अग्नी नियन्त्रण उपकरण



Fire hose
अग्नी नियन्त्रण पाइप

DANGER SIGNS



Keep Out
निर्माण क्षेत्र- टाढै रहनुहोस्



Danger
खतरा - खुल्ला खाल्डो



Danger of open trench
खतरा - खुल्ला ट्रेन्च



No operation without safety guards
सुरक्षाका साधनविना यो उपकरण संचालन गर्न निषेध

INSTRUCTION SIGNS







Slow Sign for Traffic Control
बिस्तारै जानुहोस्



Directional Exit Sign
बाहिर जाने दिशा

SAFETY AND SAFETY INSTRUCTION SIGNS



Safety Gloves Required
सेफ्टी पन्जाको आवश्यक



Safety Vests Required
सेफ्टी भेस्टको आवश्यक



Safety Glasses Required
सेफ्टी चश्मा आवश्यक



Safety Shoes Required
सेफ्टी जुता आवश्यक


निर्माणस्थलमा गर्नहुने र नहुने कुराहरु


निर्माणस्थलमा गर्नहुने र नहुने कुराहरु

Annex 8: PHOTOGRAPHS



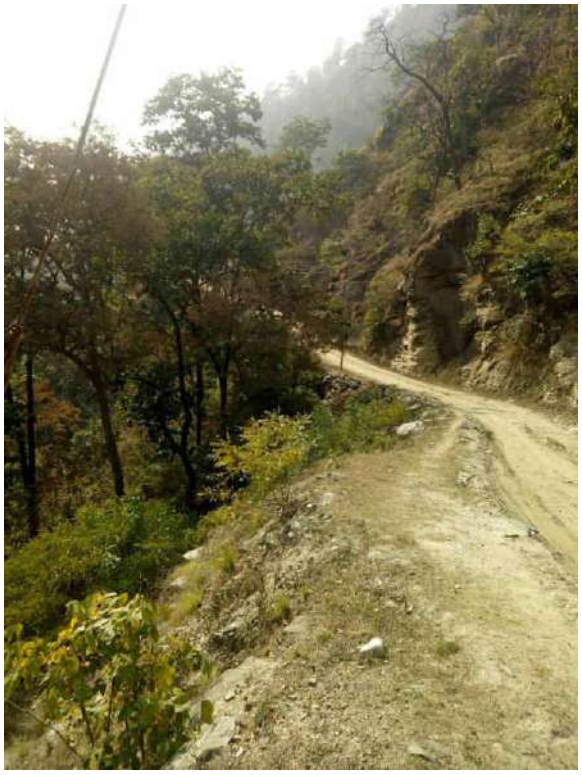
Tapping point (Chedda ghat)



Chedda khola crossing and Chhare Khola Community Forest



Line route at Cheddegad Municipality, Ward No. 05



Proposed distribution line passes through road and edge of community forest



east facing landslide (debris slide) along the proposed alignment of proposed distribution line



Cheda khola Crossing distribution line near Jyula bazar



Line route at Ugle Umra Pakha Community Forest



Consultation with local people at 16+000



Public consultation at Badaban, Chhedagad Municipality, Ward No.5

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

KUDU–SAMAILA DISTRIBUTION LINE SUBPROJECT

SUBSTATION (33/11 KV) AND DISTRIBUTION LINE (33 KV)

JAJARKOT DISTRICT, KARNALI PROVINCE

NEPAL ELECTRICITY AUTHORITY

DISTRIBUTION AND CONSUMER SERVICE DIRECTORATE

DISTRIBUTION SYSTEM UPGRADE AND EXPANSION PROJECT (DSUEP)

DURBARG MARG KATHMANDU NEPAL

CONSULTANT:

NEA ENGINEERING COMPANY LIMITED, TRADE TOWER

THAPATHALI, KATHMANDU, NEPAL

JUNE 2022

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ABBREVIATIONS

ACSR	Aluminum Conductor Steel Reinforced
AIIB	Asian Infrastructure and Investment Bank
BES	Brief Environment Study
COVID-19	Corona Virus Disease
CDP	Community Development Program
CPA	Core Project Area
DCSD	Distribution and Consumer Services Directorate
DHM	Department of Hydrology and Meteorology
DL	Distribution Line
DSUEP	Distribution System Upgrade and Expansion Project
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Regulation
EMF	Electromagnetic Field
ESP	Environmental and Social Policy
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ESSs	Environmental and Social Standards
GHG	Green House Gas
GIS	Geographic Information System
GoN	Government of Nepal
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
IP	Indigenous People
IUCN	International Union for Conservation of Nature
IUSGS	International Union of Geological Sciences
LPG	Liquid Petroleum Gas
MDB	Multilateral Development Bank
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MHT	Main Himalayan Thrust

NEA	Nepal Electricity Authority
PPE	Personal protective equipment
RM	Rural Municipality
RoW	Right of Way
SPA	Surrounding Project Area
SPM	Suspended Particulate Matter
SWM	Solid Waste Management
US EPA	United States, Environment Protection Agency
USGS	United States Geological Survey
VC	vulnerable community

Unit

%	Percent/ Percentage
CO_2	Carbon dioxide
dB	Decibel
g	Gram
ha	Hectare
HHs	Households
Kg	Kilogram
Km	Kilometer
kV	Kilovolt
kWh	Kilo Watt Hour
ltr	Liter
LV	Low Voltage
m	Meter
masl	Meter Above Sea Level
mm	Millimeter
MVA	Mega Volt Ampere
MW	Megawatt
NRs.	Nepalese Rupees
^oC	Degree Centigrade
sq.m.	Square Meter

EXECUTIVE SUMMARY

Description of Project: Nepal Electricity Authority (NEA) under Ministry of Energy, Water Resources and Irrigation is responsible for the implementation of the Distribution System Upgrade and Expansion Project (DSUEP). DSUEP will enhance the distribution system to improve reliability and quality of electric supply in the Karnali province and Lumbini province. The proposed **Kudu–Samaila Distribution Line Subproject** is located within Bheri Municipality, Ward No. 2, 3, 4, 5, 11, 12, and 13 and Kushe Rural Municipality, Ward No. 5 and 7 of Jajarkot district in Karnali Province. The Subproject requires 0.63 ha of land (Private Land) for the construction of substation. The 33 kV distribution line of 42.5 km passes along the right of way of the road and private land with installation of poles at the edge of the farm lands. The proposed subproject is financed with loan by Asian Infrastructure Investment Bank (AIIB).

Description of Environment

Physical Environment: The Subproject (substation and distribution line) area lies in hilly region of Jajarkot district. The substation lies at Latitude 28°51'13.36"N, Longitude 82°11'33.59"E and elevation of 1985 masl. The climate of the Subproject area is sub-tropical. The average temperature at the project area varied from 8.0°C to 34.0°C. The average annual rainfall is estimated at approximately 1,868.5 mm per year. The air quality of the Subproject area is within the range of national ambient air quality standard while noise was found above noise quality standard because of the vehicular noise nearby the settlement area. There are no any water sources recorded within distribution line (33kV) and nearby the substation area.

Biological Environment: The proposed substation area land is private land. The land is barren. No need not to cut any trees at substation site. The proposed 33 kV distribution line passes from the edge of Hariyali Mahila Community Forest, Deulidada Community Forest, Bhagwati Community Forest, Salleri Community Forest, Chumpatel Community Forest. The vegetation species recorded during the screening field visit are: Sal (*Shorea robusta),* Botdhayero (*Lagerstroemia parviflora*), Aamala (*Emblica officinalis*), Jamun (*Syzygium cumini*), Bhalayo (*Semecarpus anacardium*), Fern (*Tectaria coadunata*), Rohini (*Mallotus philippensis*), Chir pine (*Pinus roxburghii*), Banmasa (*Lanatana camara*), Banmara (*Ageratina adenophora*), Pipal (*Ficus religiosa*), Rhododendron (*Rhododendron arboretum),* Mayal (*Pyrus pashia*), Kafal (*Myrica esculenta*), Chutro (*Berberis aristata*), Utis (*Alnus nepalensis*), and Banj (*Quercus leucotrichophora*). Similarly, wild animal recorded during the public consultation are: Barking Deer (*Muntiacus muntjak*), Marsh Rabbit (*Sylvilagus palustris*), Jackel (*Canis aureus*), Malayan Porcupine (*Hystrix brachyuran*), Ghoral (*Naemorhedus goral*), Rato Badar (*Macaca mulatta*), Wild Boar (*Sus scrofa*), and Malsapro (*Yellow throated marten*). Altogether ten species of birds were noted around the surrounding project area; House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Eagle (*Haliaeetus leucocephalus*)*,* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* Kalij (*Lophura leucomelanos),* Jureli *(Hypsipetes leucocephalus),* Rock Pigeon *(Columbia lebia),* and Chyakhura *(Alectoris chukar).*

The proposed 33 kV distribution line passes through the 16 different community forests. A total of 14.82 ha of the forest area will be occupied by RoW of proposed 33 kV distribution

line. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 6,757.

Socio-Economic Environment: The major ethnic compositions within the surrounding project area i.e., Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and, Ward No. 5 and 7 of Kushe Rural Municipality are Dalit (33.4%), Chhetri (28.5%), Thakuri (21.8 %) and Magar (9.2%) of the total population of 23,811. The implementation of the Subproject will increase the electricity beneficiaries to 3922 HHs, 29 commercial purposes and 10 industries. Jajarkot Khalanga is the nearest business market nearby the Subproject. The transportation facilities in this local level seems to be satisfactory. Tap/piped water is the main source of drinking water in the surrounding Subproject area. People of the Subproject have access with communication facilities mainly through mobile telephone services. The nearest and easily accessible equipped health facility to the proposed Subproject is in Jajarkot Hospital at Thaple (Bheri Municipality, Ward No. 4) located at 200 m distance from proposed distribution line alignment and health post at Dhime (Kushe RM, Ward No. 5). The main occupation of people in the area is agro base with nearly 63% contribution followed by small trade and business/enterprises and services.

Potential Impacts and Mitigation Measures: Civil works will be involved with temporary impacts on air, noise and water quality and occupational and community health and safety; particularly related to working with electricity and in the context of the COVID-19 pandemic. Long-term impacts, although insubstantial, during operation and maintenance include occupational and community health and safety risks related to the presence of electricity infrastructure. The potential environmental issues and mitigation measures identified in screening and the preparation of ESMP report will be addressed during the compliance monitoring carried out by the safeguard team. There will be no issues of land requirements for the pole erection and for the distribution line people have suggested to install poles at the edge of farm-lands, without affecting any private structures along the distribution line. But the proposed substation land is private land, so there is necessity of land acquisition which issues will be fulfilled by Resettlement Plan. The implementation of the proposed Subproject needs 14.82 ha of forest area with estimated loss of 6,757 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. The compensatory plantation will be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019) in the ration of 1:10. The ESMP cost estimated for the Subproject is NRs 13,00,000.00 associated to mitigation measures and monitoring activities. NEA Project Implementation Unit has agreed on the estimated cost for the mitigation measures and monitoring activities.

Environmental and Social Management Plan: The ESMP serves as a guide to implement environmental and social mitigation measures and responsibility of the concerned agencies during the construction and operations of the Subprojects. Monitoring and inspection of the environmental and social activities will be carried out by Environment and Social Management Unit and Project Supervision Consultant of PIU. ESMP will be an integral part of the contractor's Bidding document which will be updated by the contactor during the sub-project construction period.

Institutional Arrangements: To ensure the full compliance to the ESMP, institutional arrangement for monitoring and reporting has been proposed. All the resources needed for

the implementation of ESMP for the construction and operation phase will be provided by the PIU. Project Supervision Consultant's with Environmental and Social Safeguard Specialist will be responsible for compliance monitoring activities during the construction phase. Environment and Social Management Unit of NEA will provide regular updates to the site offices regarding the implementation of ESMP. Contractor shall prepare an Environment, Health and Safety (EHS) plan approved by the PIU before field mobilization. Contractor should mobilize a safety officer at each work site during the construction period.

Public consultation*:* Public consultations have been conducted in the Subproject area. People in the Subproject area noted that electricity service is poor with frequent interruptions. People have suggested to install poles at the edge of farm-lands, and project components should not affect any house and structures along the line. The impacts on the crops while stringing of lines should be minimized. Prospective electricity consumers and people to be affected are supportive and have recommended for quick implementation of the project.

***Grievance Redress Mechanism (GRM*)**: A three-tier Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental issues at Subproject level. In each Subproject, two levels i.e., Tier-I and Tier-II of Grievance Redress Mechanism have been established. During the ESMP study period, NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the Subproject level.

Conclusion: The environmental impacts envisaged from the implementation of proposed Subproject are site specific, short term, temporary and reversible in nature. The Subproject will provide significant benefits to people and economy by providing the reliable and improve electricity supply. This ESMP is considered sufficient to mitigate the environmental and social issues identified for the Subproject and will be updated during the Subproject construction stage.

1. INTRODUCTION

1.1 Project Background

The proposed Distribution System Upgrade and Expansion Project (DSUEP) will enhance the distribution system to improve reliability and quality of electric supply in the Karnali Lumbini province. The project aims improvement in voltage level and reduction in power loss which in turn will improve Nepal Electricity Authority's (NEA) financial health, improve electricity supply reliability, and reduce dependence on petroleum-fueled accessories. Government of Nepal (GoN) has envisaged DSUEP to extend the reach of 33 kV and 11 kV distribution lines "to achieve affordable electricity fulfilling the demands at the local levels for all the households by 2022". Asian Infrastructure Investment Bank (AIIB) is financing a loan to upgrade existing and build new distribution systems in Lumbini Province and Karnali Province of Nepal. This ESMP is prepared for Kudu–Samaila distribution line Subproject of DSUEP.

This Subproject has three major components:

Component 1: construction, extension and augmentation of distribution lines and substations, especially 33 kV lines and 33/11 kV substations.

Component 2: construction of 11 kV lines, distribution transformers, and Low Voltage (LV) lines for new power distribution facilities.

Component 3: Capacity Building, Project Implementation Support, and Technical Assistance.

1.2 Scope of Study

This study ensures that the project meets the requirements of Nepal Government's Environmental Regulations and Environmental and Social Policy (ESP) & Environmental and Social Standards (ESSs) of AIIB. This report provides the measures for environmental and social management, monitoring and reporting of the project.

1.3 Objective of ESMP

The Environment and Social Management Plan aims to sets out the measures required to maximize the benefits of the project, avoid, minimize and mitigate any adverse environmental and social impacts. The overall objectives of the ESMP study are to:

- Describe the existing natural and socio-economical resources in and surrounding Subproject area;
- Based on existing environmental conditions, identify and assess potential significant impacts during project preconstruction, construction, and operation & maintenance stages;
- Identify and recommend mitigation measures to minimize any potential impacts caused by Subproject activities;
- Identify the local concerns on environmental and social issues and address them;
- Develop environmental management plan and monitoring plan including cost;

- Recommend institutional arrangement, including capacity building to ensure proper environmental and social safeguards implementation during construction and operation phases.

1.4 Legal Provision

According to the E & S safeguard Screening report, safeguard risks/issues identified for this Subproject fall under Category III (ESMF), which triggers the preparation of ESMP to execute the Subproject. This Subproject has minimal or no adverse environmental and social impact; does not physically displace any family; and does not result in economic displacement of more than 10% of productive assets for any family.

Pertaining to Rule 3 (1), Environment Protection Act (EPA), 2019 describes completing Environmental Studies as per Schedule 1 or 2 or 3 under Environment Protection Regulation (EPR) 2020 (First Amendment in 2021/05/24 on Nepal Gazette), detailed environmental studies Brief Environmental Study (BES) or Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) is required. For this Subproject, pertaining to Rule 3(1), EPA (2019) describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1) under EPR (2020) state “use of forest area for the electricity distribution line project up to 66 KV”. The proposed Subproject will intercept the Jungle Danda Community Forest (CF), Kaina Timure Danda CF, Budhe Dhungaa CF, Jagatipur CF, Deuli Danda CF, Bhagbati CF, Bohara CF, Syala Pakha Kale Gaun CF, Dara Bhadale Pakha CF, Patal Deurali CF, Bastola CF, Mayur Pankhi CF, Masara CF, Banjh Bisauna CF, Khurpa CF and Chhum Patal CF land area for the purpose of 33 kV distribution line extension and substation construction. Thus, as per EPR (2020), a BES is mandatory for the proposed sub project.

1.5 Methodology for the ESMP

The methodology that was followed while conducting the ESMP study is as follows:

i. Literature Review: Review of published literature were conducted, with priority given to publications of government institutions as well as international organizations, to collect information on project surroundings. The Municipality/Rural Municipality and its Ward profiles are used to collect the socio-economic baseline information of the Subproject. National policies, legislative frameworks and Multilateral Development Bank (MDB) policies were reviewed to understand the priorities and any legally binding requirements were studied that should be complied with while implementing the project. The Legislative provisions relevant to the project are listed in **Annex 4**.

ii. Field Survey and Investigation: Field surveys were conducted to generate information on the physical, biological and socio-economic environment of the project area. The physical environment; air quality data was monitored by Temtop Airing-1000 PM Detector, noise level by UNI-T UT 353 Mini Sound Meter (dB) and water quality by EXTECH ExStik II DO600. Field observation of the core project area and the surrounding vicinity (500m) of project footprint area was applicable for the biological assessment. A circular quadrate of radius 12.5m was used for the estimation of the number of trees presence within the RoW of the proposed distribution line. A total of

14 different sample quadrate were used and trees numbers were estimated by extrapolation within RoW. The total enumeration of the trees to be cleared for the implementation of the sub project will be estimated during the BES study. The tree clearance approval is made once the Brief Environment Study (BES) is approved from the Ministry of Energy, Water Resources and Irrigation. Priority was given to the consultation with local communities at substation sites and the settlement areas that benefit from the project. Pertaining to Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019), BES report will be prepared. NEA/PIU must take approval from Government of Nepal, for the use of forest on the implementation phase. As per section 17 (3), the compensatory ratio for the loss of trees should be made in the ratio of 1:10 and require care, maintenance and upkeep of the planted trees before handover to concerned forest office after 5 years.

iii. Data Analysis: All potential Subproject impacts on physical, biological, socio-economic and cultural resources were integrated and assessed using best practice of Multilateral Development Banks, as well as compliance with national requirements. The Geographic Information System and SW Maps were used for the field assessment and analysis of the CPA and SPS data and presentation of the maps in the ESMP report. The project foot print Ward and Municipality/Rural municipality are considered for the collection of socio-economic and baseline information.

iv. Impact Evaluation: Significance of impacts are evaluated on the basis of reversibility, nature, magnitude, extent and duration of the impact. Identification of magnitude, extent and duration is as provided in the National EIA Guidelines, 1993 of Nepal. While evaluating the impacts and prescribing mitigation, maximum efforts were made to get expert opinion and input from the DSUEP's technical and safeguard consultant team.

v. Public Consultation: As per the Government of Nepal EPA and the AIIB Environmental and Social Policy (ESP), pre-notifications with subject of consultation, venue, and time were given at Subproject foot-print area, local level and affected Ward office in presence of concerned local stakeholders. Consultations were conducted in the Subproject area, at substations and the distribution line system settlement areas with local stakeholders.

vi. Report Format: The ESMP report is prepared as per the Environmental and Social Policy (ESP) of the AIIB, which contains an executive summary, a main report, and annexes as appropriate, including one on the nature and findings of consultations undertaken. All the comments and suggestions from the field consultation are mentioned in the ESMP report.

1.6 Classification of Impact Area

The National EIA Guidelines (GoN, 2050) has mentioned on the "Core Project Area", and "Surrounding Project Area" based on proximity and magnitude of the impacts due to construction and operation of the proposed project.

Core Project Area (CPA) refers to the temporary and permanent area for the proposed project construction and associated activities. It is area where direct impacts can be seen. For **Kudu–Samaila Distribution Line Subproject**, proposed substation area with 0.63 ha and the 33 kV distribution line with 42.5 km length is considered as CPA. The Subproject components are located within the Subproject Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and Ward No. 5 and 7 of Kushe Rural Municipality. The major settlements in the subproject area are Kudu, Tharpudada, Kukhurakot, Gairikhali, Thaplechaur, Bhaunthana, Pokhara, Panchkatiya, Damdala, Dhime, Khurpa, Jahargaun and Thinkethala. The distribution line stringing route passes along the cultivated land (1+050-1+450, 2+800-2+900, 3+900-4+550, 5+185-5+200, 5+250-5+385, 28+225-28+975, 30+250-30+300, 30+400-30+600, 31+050-31+100, 31+250-31+700, 33+850-35+600, 36+020-36+200, 36+550-36+600, 36+700-36+800, 38+400-38+810), along the right of way of the road alignment (1+450-2+800, 5+385-5+500, 25+350-28+225, 28+975-30+250, 30+300-30+400. 31+700-33+825, 36+200-36+300, 36+800-38+400 and 38+810-39+500), along the barren land (35+830-36+020, 36+300-36+550, and 36+600-36+700) and forest area (0+800-1+000, 1+400-1+600, 2+000-4+000, 4+400-5+200, 5+600-7+100, 7+400-9+400, 10+600-13+800, 14+200-15+000, 19+000-23+400, 24+600-28+200, 29+400-30+200, 30+600-31+200, 32+000-33+400, 34+400-35+800 and 37+400-42+100).

Surrounding Project Area (SPA) is the immediate vicinity of the footprint location of the proposed Subproject site. SPA is the moderate and indirect impact area. For this Subproject the 33 kV distribution line will be located within the Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and Ward No. 5 and 7 of Kushe Rural Municipality of Jajarkot district is considered as SPA. The impact area showing the CPA and SPA area is presented in the google map **Figure 1-1**.

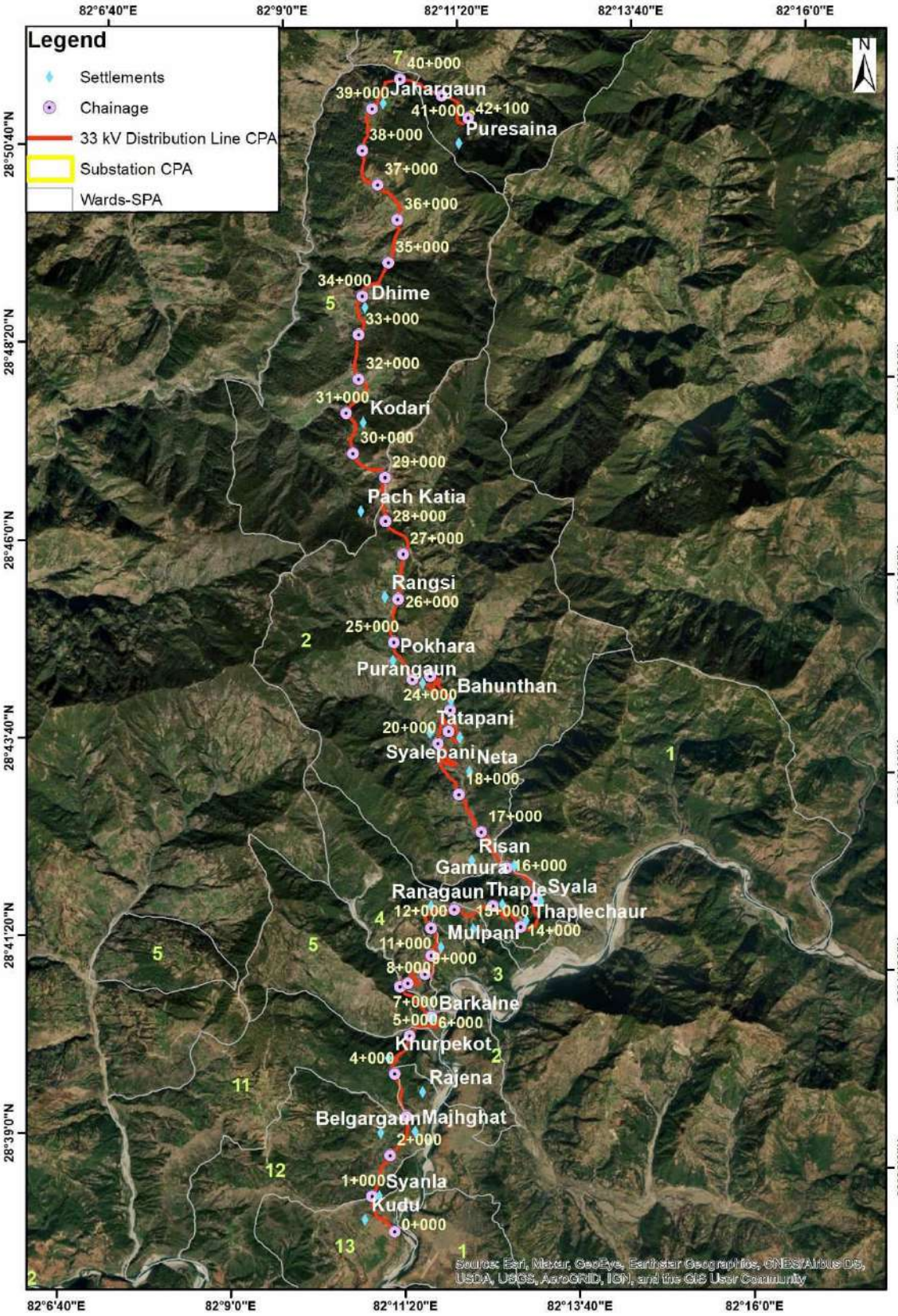


Figure 1-1: Core Project Area and the Surrounding Project Area Wards of the Kudu–Samaila DL Subproject

2. DESCRIPTION OF THE SUBPROJECT

2.1 Subproject Location and Accessibility

The proposed **Kudu–Samaila Distribution Line Subproject** is located within Bheri Municipality, Ward No. 2, 3, 4, 5, 11, 12, and 13 and Kushe Rural Municipality, Ward No. 5 and 7 of Jajarkot district in Karnali Province. The tapping point of Subproject 3 lies in exisiting line 33 kV Kudu substation at Tinkethala of Bheri Municipality- 13, Jajarkot. The proposed distribution line (33 kV) is of 42.5 km length and runs by the edge of Chhinchu-Jajarkot-Dunai Road section up to Syala and follow the edge of private farm lands and enters to the Jajarkot Khalanga, Dhumjala and Dhime settlement area passing along the RoW of access road. There is access to road transport within the proposed Subproject Ward area. The Subproject location and the accessibility map are presented in the map below **Figure 2-1**. The main features of the Subproject are presented in **Table 2-1**.

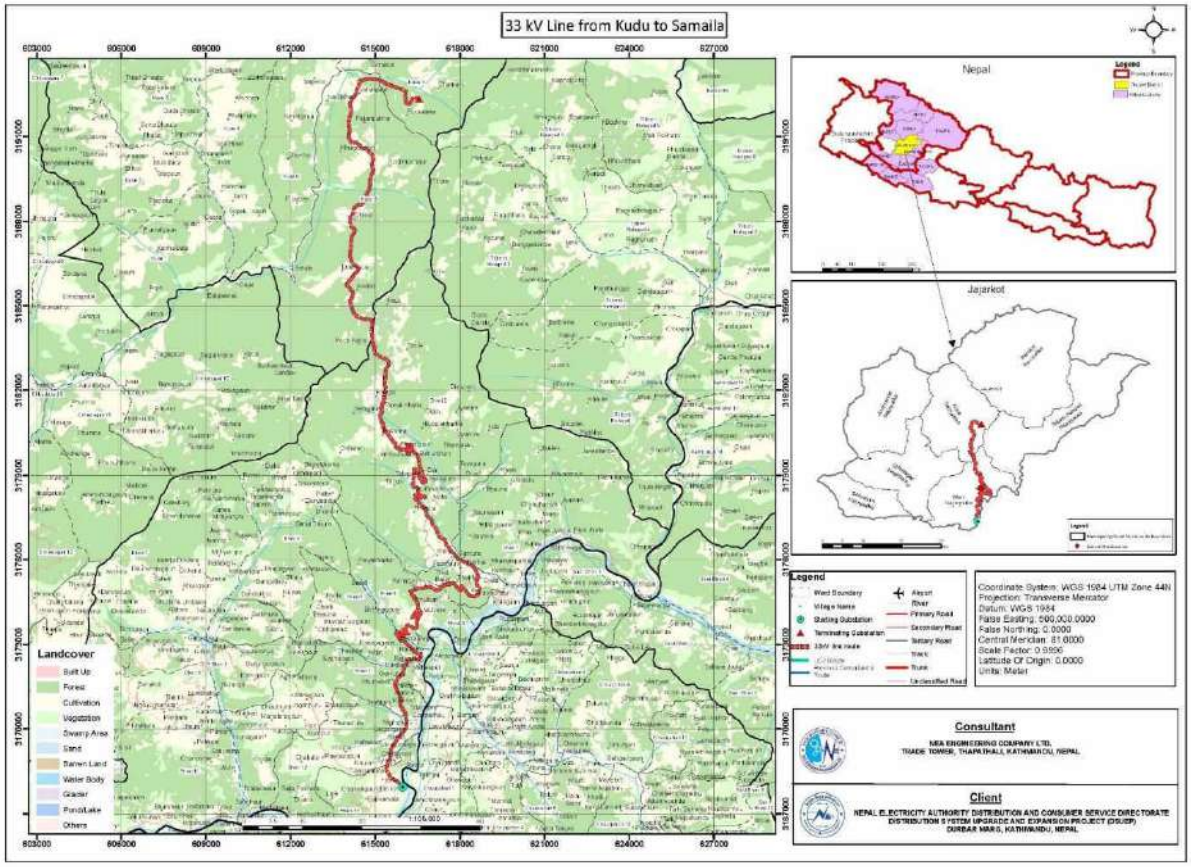


Figure 2-1: Location and Accessibility Map of Kudu–Samaila Subproject[1]

Table 2-1: Technical Description of the proposed Subproject

[1] *Source: Department of Survey, 1995 and Field Study 2021*

Description	Features
Proponent	Nepal Electricity Authority
Project	Distribution System Upgrade and Expansion Project (DSUEP)
Subproject	**Kudu–Samaila Distribution Line Project**
Funding Agency	AIIB
Project Location	Bheri Municipality, Ward No. 2, 3, 4, 5, 11, 12, and 13 and Kushe Rural Municipality, Ward No. 5 and 7 of Jajarkot district, Karnali Province
Distribution Line	
33kV Line Starting Point	Tapped from Existing Kudu Substation, Bheri RM- 13, Jajarkot. Co-ordinate: Lat 28°38'0.78"N, Long 82°11'10.31"E
33kV Line End Point	Samaila Substation (Proposed) at Kushe RM -7, Tinkethala, Jajarkot Co-ordinate: Lat 28°51'13.36"N, Long 82°11'33.59"E
Land type	Government/Private
System Voltage	33 kV
Max, Min System Voltage	36, 30 kV
Climatic Condition	Wind Speed: As per IS 802-1-1 Maximum Ambient Temperature: 34°C Altitude (Min, Max): 735, 2150 masl
Length of Line/ No. of Pole	42.5/1063 Poles
Right of way	6 m
Number of Circuit	1
Conductor	ACSR Dog
Line Capacity/Thermal Limit (approx.)	13.4 MW at 0.9 power factor
Type	Steel Tubular Pole with 11m/13m Height
Pole Configurations	Single Pole Structures, H-Pole Structures etc. (With and without Stay Sets)
Diameter of a Single Pole (approx.)	0.22m (As per IS 2713-3)
Planting Depth of Pole	2.2m
Insulators	Porcelain Disc and Pin Insulator
Substation	
Location	Samaila Substation (Proposed) at Kushe RM -7, Tinkethala, Jajarkot Co-ordinate: Lat 28°51'13.36"N, Long 82°11'33.59"E Elevation: 1985 masl
Land type	Private
Voltage Level	33/11 kV
Substation Capacity	8 MVA
Number and Capacity of Transformer	1 nos., 6/8 MVA
Type of Transformer	3 Phase, ONAN, Mineral Oil
Type of Substation	AIS (33kV) and Indoor (11kV)
Number of 33kV Line Bays	1
Number of 33kV Transformer Bays	1
Number of 11kV Feeders	4
Substation Area	0.63 ha Parcel Number…….

2.2 Subproject Components

The major components of the Subproject are the 33/11 kV substation and 33 kV distribution line (DL). The 33 kV DL is tapped from an existing 33 kV network line and acts as a source feeding to the proposed 33/11 kV substation. 11 kV distribution feeders emerge from the substation, eventually supplying the electricity to the consumers. The structures of the Subprojects are briefly described below.

2.2.1 33 kV Distribution Line (DL)

The 33 kV DL serves as the pathway for feeding electricity to the proposed substation. Aluminum Conductor Steel Reinforced (ACSR) type conductors are stringed on Steel Tubular Pole from the starting point of the line. In general, the 33 kV lines comprises of the Steel Tubular Poles, Insulators, Conductors and Supporting Stays. Length of 33 kV distribution line is 42. 5 km and the total number of steel tubular poles to be erected are estimated as 1063.

Steel Tubular Poles: Steel tubular poles will be installed in this Subproject. 11 m and 13 m long poles shall be used depending upon the location of the poles and number of circuits used in the line. The poles to be erected, will be supported by stays wherever necessary. Insulators will be installed at cross arms to support the conductor from the poles.

Insulators: The insulators provide insulation to the poles from high voltage in the conductors. Pin type insulators will be employed for suspension poles whereas disc types will be employed for tension poles. Porcelain type insulators will be used owing to its dielectric strength, better compressive strength, higher resistance to degradation, suitability for extreme climate, and environment friendly characteristics over its counterparts.

Conductor: ACSR Conductor – Aluminum Conductors Steel Reinforced, conductors with stranded layers of aluminum and steel will be used for 33 kV lines. Aluminum strands carry the current whereas the steel in between provides the mechanical strength for the conductor. Typically, 100 sq. mm conductors are used in 33 kV line for this Subproject which is also known as ACSR DOG conductor.

Stay/Guy Sets: Stay Wires are used to support or provide the balancing tension to the poles. These are made up of steel materials and can be used in multiples for a single pole, depending upon the requirements.

2.2.2 Substation

The proposed substation 33/11 kV is of capacity 6/8 MVA. The substation plays the role of lowering the 33 kV voltage level to 11 kV, which will then be stringed as distribution feeder to supply the consumers. The major component of the substation is power transformer, which is supported by the switchgear components and Civil Structures. The facility and components sample pictures are shown in **Annex 3**.

Transformers: Transformer is the major component of the distribution substation. It transforms power from higher voltage to lower voltage for distribution purpose. Power Transformers are used for the 33/11 kV substations. These transformers are mineral oil based with ONAN/ONAF (Oil Natural Air Natural/Oil Natural Air Forced) cooling

mechanisms. In existing practice, the transformers used for 33/11 kV substation in Nepal are typically of 1 MVA, 3 MVA, 8 MVA and 16 MVA depending upon the load supplied by the substation. This Subproject comprises of power transformer of 6/8 MVA ONAF type.

Electrical Switchgear: Electrical Equipment comprising of Circuit Breaker, Earth Switch, Current Transformer, Potential Transformers, etc. installed in the substation are called Electric Switchgear. They facilitate the objective of power conversion.

Civil Structures: A control building is essential for the operation of the substation. It houses the operating station, along with battery systems. Guard House and Staff Quarter are other essential buildings for smooth operation of the substation.

Switchyard, Boundary, Roads, Drainage and Essentials: The outdoor civil structure in the proposed substation includes the boundary wall, main entrance gates and Switchyard. The power transformer and components of power system are laid in the switchyard based on the prudent engineering practice. Steel structures are used to support the components as per component wise requirements. Roads are paved within the boundary as essential for the transport of power transformer and other components. The substation location also serves as site store for storage of distribution system components.

2.2.3 11 kV Lines and LT Lines

11 kV lines and LT lines take the access of electricity to the consumer households. It is why the construction of those lines are always encouraged by the local people. The line route, thus the installation of poles and lines, are envisaged to go through the edge of local roads. If any line route pass through any private lands, permission from the corresponding land owner will be taken before starting the construction of those lines start.

The detailed line route survey for 11 kV and LT lines have not been done yet. The scope of detailed survey is in the scope of the construction Contractor. The construction Contractor will conduct Pre-Construction Survey (PCS) to finalize the line route of 11 kV lines and LT lines for the construction. PCS will prepare the detailed line route of those lines and submit to PIU for approval. After the detailed line route is submitted by the Contractor and approved by PIU, E&S team of Project Supervision Consultant (PSC) will conduct an E&S study and submit the findings that

- Do the lines pose any adverse Environmental or Social issues?
- If there are any Environmental or Social issue, how can they be resolved? If the lines do not pose any adverse Environmental or Social issue, the lines will be cleared by PIU after seeking concurrence from AIIB.
- If the solution measures are not implementable in the field, PCS will suggest for any other way to divert or reroute the lines? If yes, PCS will propose alternative line route. The lines will be cleared by PIU after seeking concurrence from AIIB, given that the lines do not pose any adverse Environmental or Social issue.

2.3 Major Construction Activities in the Subproject

Activities in the Subproject area can be sub-divided into three categories viz, Pre-Construction Phase, Construction Phase and Operation Phase. For the proposed Subproject, trees and bushes in the Right of Way of 33 kV lines have to be cleared whereas, no trees within the proposed substation boundary have to cleared for the construction work. The proposed Kudu–Samaila Line Subproject intercept forest area 14.82 ha. The estimated loss of trees species in the Right of Way of 33 kV lines are 6,757.

I. activities to be carried out before the construction phase are:
- Demarcation of land area for the proposed substation
- Receive public opinion
- Make clearance of the substation land area permanently
- Distribution line route selection
- Approval to cut down trees from the concerned government authorities

II. **Construction phase**: The activities to be carried out during the construction phase are:
- Assign the land area for temporary storage of construction materials
- Transportation of construction materials
- Leveling of land area for the proposed substation
- Cutting down of trees in Right of Way of 33 kV lines
- Construction of substation structures
- Pole erection work for 33 kV, 11 kV and low-tension distribution lines
- Stringing of 33 kV, 11 kV and low-tension distribution line

III. **Operation phase**: The activities to be carried out during the operation phase are:
- Maintenance of the substation and 33 kV distribution line route

2.4 Energy to be used

During the construction period diesel fuel will be used to power construction equipment and transport vehicles, which emits air pollutants and greenhouse gases in insignificant quantity. Use of firewood is restricted in the labor camp, whereas the Contractor shall supply LPG for cooking foods to the workers.

2.5 Land Required

The **Kudu–Samaila Subproject** will require about 0.63 ha land for the placement of substation. The land is private land and will be managed by NEA to construct the substation in the designated area. The 33 kV distribution line is 42.5 km length which pass from private farm lands, Community Forest and along the right of way of the road.

2.6 Material Requirement and Sources

A 33/11 kV substation, 33 kV, 11 kV and low-tension distribution lines will be constructed for this Subproject. Minimal excavation at the pole locations will be done to erect steel tubular poles of 11 m and 13 m. The depth of burial for 11 m (approximately 256 kg) and 13 m (approximately 343 kg) poles are 1.8 m and 2.17 m respectively. The construction works for substation will not produce significant amount of spoils and thus it will not require spoil-

dumping site. Similarly, excavation works carried out for digging pit holes for poles produces insignificant spoils which does not require management of earthworks.

Civil construction works will involve excavation for foundation of substation, steel reinforcement, cement, coarse aggregates and fine aggregates (sand). Materials will be procured from legally operating markets. The design team has provided the following estimate of construction materials required for 33 kV distribution line and the substation.

Table 2-2: Approximate Quantity of Material for 33 kV line

SN	Particular	Unit	Requirement
1	Amount of Steel	Ton/Km	5800
2	M15 concrete for Pole base	Cum/Km	12.5

Source: Design Report, DSUEP

Table 2-3: Approximate Quantity of Material for 33/11 kV Substation

SN	Particular	Unit	Support Structures, Road, Drainage	Control Building	Staff Quarter	Office Building	Guard House
1	M15 Concrete	cum	100	25	224	120	5
2	M25 Concrete	Cum	300	170	125	75	27
3	Reinforcement bar	Ton	7	27	20	12	4

Source: Design Report, DSUEP

2.7 Major Equipment and Power Requirements

Major equipments used during the Project implementation are:

One Excavator, One Roller, One Drilling Machine, One Crane, one Grid Supply of 100 kVA Distribution Transformer, and two 50 kVA capacity diesel generators.

2.8 Workforce Requirement

Local people in the surrounding will be encouraged for the employment. Based on the skills (skilled, semi-skilled and unskilled labor), local people shall be used for the construction and both male and female will get equal opportunity during construction. The number of human resources required depends upon the complexity of the project as well as the geographical location of the project. In case of construction of 33 kV lines and 33/11 kV substations, the workforce typically varies from terai to hilly to mountain region. Expected number of manpower employed is enlisted hereunder.

Table 2-4: Human Resource Required for construction of 33 kV line and substation in a day of Construction

SN	Human Resource/Day	For Distribution Line	For Substation
1	Engineer (No.)	1	2

SN	Human Resource/Day	For Distribution Line	For Substation
2	Supervisor (No.)	2	4
3	Foreman (No.)	3	5
4	Skilled (Lineman/Electrician) (No.)	5	7
5	Helper (No.)	3	12
6	Labour (No.)	15	20

Source: Design Report, DSUEP

2.9 Construction and Implementation Schedule

Implementation of the proposed Subproject comprises construction of a new 33/11 kV substation, 33 kV lines, 11 kV lines, low tension lines, and installation of distribution transformers. It includes construction and installation of components as mentioned in subsection 2.2. The estimated completion period is 24 Months.

Table 2-5: Construction Schedule of Project Implementation

SN	Activities/ Months	**Months** *(After the completion of Detailed Survey Study)*					
		1-3	**4-6**	**7-10**	**11-15**	**16-20**	**20-24**
1.	Invitation for tender, evaluation, and award						
2.	Implementation of Environmental and Social Safeguards						
3.	Erection of Poles						
4.	Stringing of conductor						
5.	Construction of substation						
6.	Charging and Testing						

Source: Design Report, DSUEP

3. DESCRIPTION OF THE ENVIRONMENT

3.1 Physical Environment

3.1.1 Topography and Land Use

The Subproject area lies in Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and Ward No. 5 and 7 of Kushe Rural Municipality of Jajarkot district, Karnali Province. The tapping point is situated at Latitude 28°38'0.78"N and Longitude 82°11'10.31"E with an elevation of 735 masl (**Figure 3-1**). The proposed distribution line (33 kV) of 42.5 km passes through the edge of Chhinchu-Jajarkot-Dunai Road Section up to Syala and follow private farm lands, settlement and community forest area.

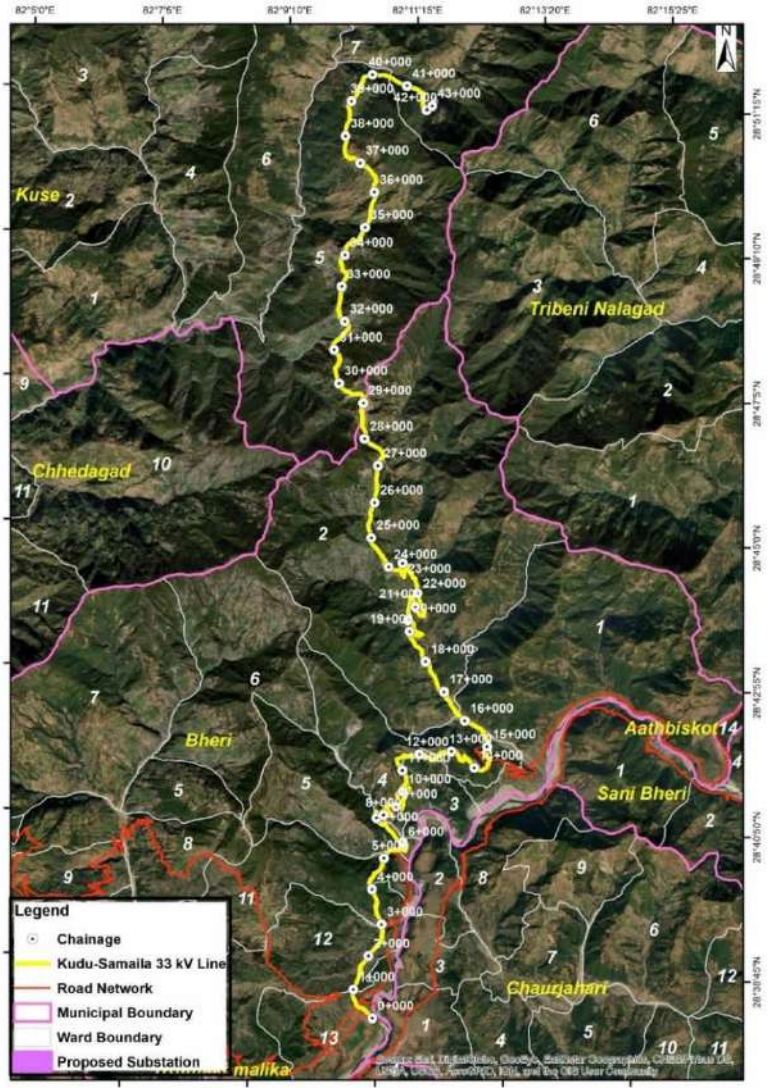


Figure 3-1: Location map and Land use details of the Subproject[2]

The substation lies at Latitude 28°51'13.36"N, Longitude 82°11'33.59"E and elevation of 1985 masl (**Figure 3-3)**. The proposed substation boundary lies within 0.63 ha area. The site is primarily within the flat land with little depressed. It lies in open and clear barren land and

[2] *Source: Topographic Map, Department of Survey, 1995 and Field Study 2021*

private land. None of the private and public entities will be affected due to the implementation of the distribution line system, as it will be installed within the RoW of existing road and the edges of the cultivated land. The land use map details with the components of the Subprojects are presented in **Annex 2**.



Figure 3-2: Tapping Point of DL at Bay extension point at kudu substation



Figure 3-3: Kudu–Samaila Substation View

3.1.2 Geology

Geologically, the proposed Subproject lies on the Lesser Himalaya sequence of Ranimatta Formation of Precambrian age. At Belgar Kastari the line passes from the left side of the village to the right side of the village, passing through weathered and brittle deformed foliated phyllite, quarzite in the Khalanga section. At Rautakhoriya line emerges from silty clay cultivation and the line. No major geological hazard has been identified associated with the proposed Subproject except moderate chances of erosion within the expanded flood plain area of local stream.

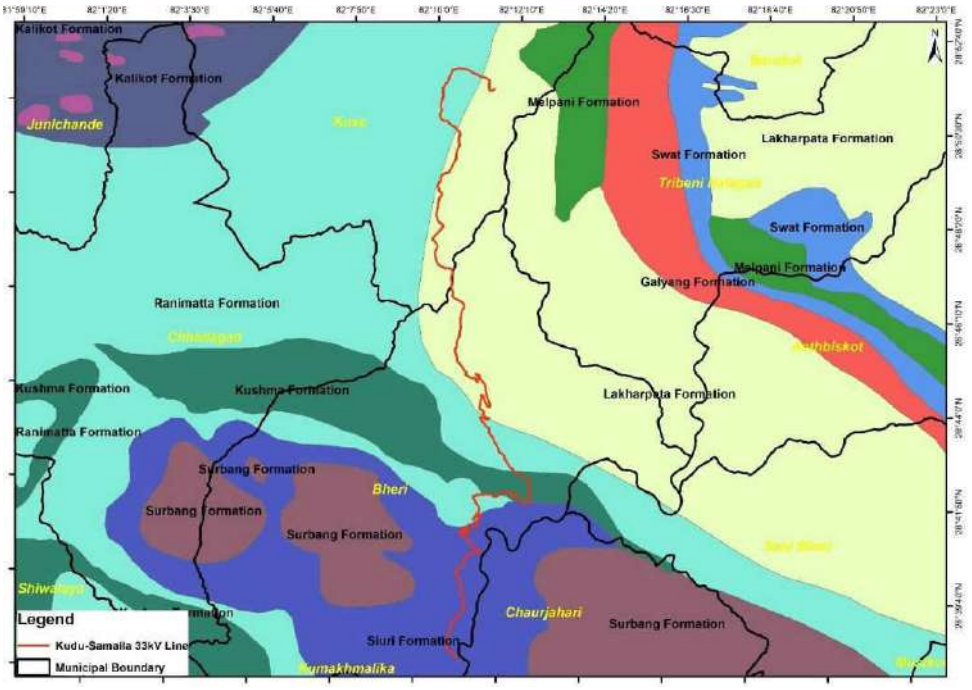


Figure 3-4: Geological Map of proposed Subproject Area[3]

[3] *Source: Department of Mines and Geology (DMG), 2020*

The line leaves the barren land at the Dhime and travels to the spur/valley, where it follows the weathered quartzite rock to the cultivation land of the Laxmi School. The line connects the Jogimara to the cultivation ground's cohesive silty clay soil. The line runs from the left side of the road to the edge of a colluvium deposit of phyllite and quartzite boulders at Jargau. The land for the proposed substation is desolate with phyllite, quartzite and other minerals found in colluvium deposits.

3.1.3 Seismology

The entire country of Nepal is in a seismically active zone caused by subduction of Indian tectonic plate under the Tibetan Plate. According to National Seismological Center of Nepal several big earthquakes have been felt in Nepal, the earthquakes of magnitude 6 to 7 are mostly confined to the Main Himalayan Thrust (MHT) between the foot hills and the Higher Himalaya. Moreover, earthquake generation is confined to the crustal depth of 20 km. However, shallow earthquakes at depths down to 6 km are generated as a result of strike slip faults. Therefore, the substations and distribution lines of this Subproject will be designed and operated in accordance with seismic design requirements and best engineering practice. The seismic activity in Nepal between 1964 and 2019 as in IUSGS portal is shown in **Figure 3-5.**

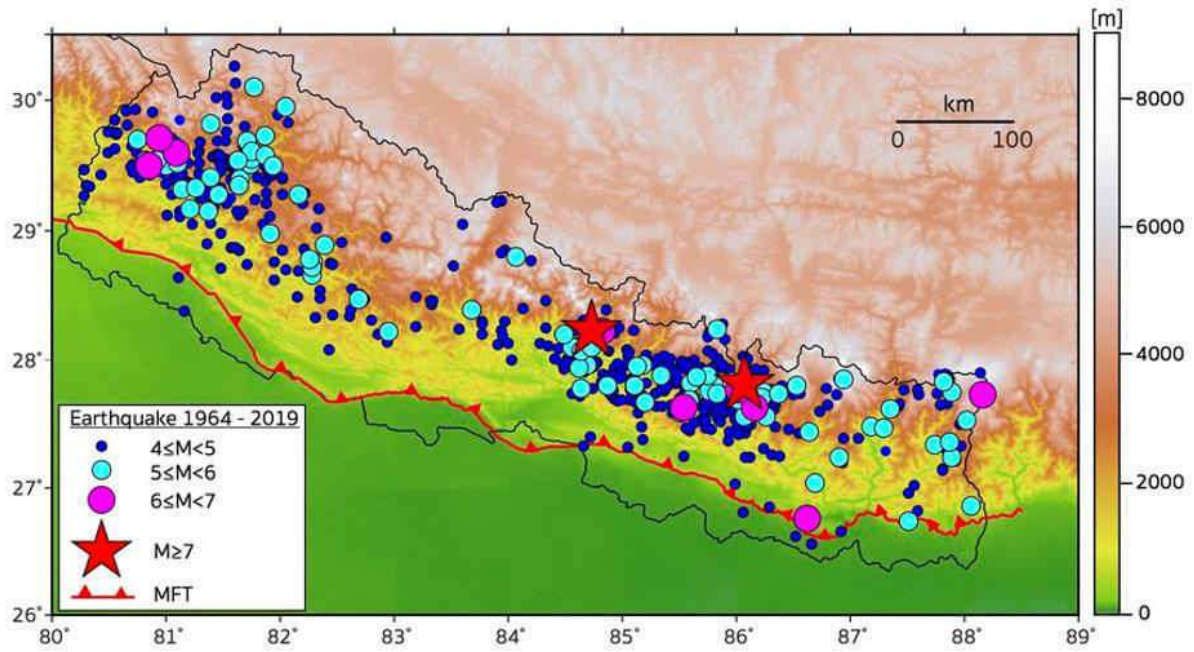


Figure 3-5: Seismicity map of Nepal from 1964 -2019[4]

3.1.4 Climate

The climate of the Subproject area is sub-tropical. According to DHM 2021, the average temperature at the project area varied from 8.0°C to 34.0°C. The relative humidity is in the range of 84% to 87 %. The average annual rainfall is estimated at approximately 1,868.5 mm per year. Almost 80% of rainfall occurs during monsoon (June to September).

[4] *Source: USGS catalogue, 2019*

3.1.5 Air, Noise, Water Quality and Polluting Sources

The major air polluting sources recorded are only from vehicular emission and dust problem from plying of vehicles and high wind velocity. Noise polluting sources noted at the time of field study are similar to the air polluting sources. Unnecessary honking along the access road of site is the source of noise generation. Following table shows the real-time quality of air and noise during field study.

Table 3-1: Ambient Air and Noise Quality within the Proposed Subproject Site

SN	Location/ Chainage	**Air Quality[5]-**Temtop Airing-1000 PM Detector (µg/m^3)					**Noise Level -**UNI-T UT 353 Mini Sound Meter (dB)		
		$PM_{2.5}$	**Level**	**PM_{10}**	**Level**	**Average Time of Measurement**	**Measured**	**Ref.[6]**	**Area**
1.	Tapping Point	46.5	100	46.8	200	1-hour	41.9	50	Residential Area
2.	Substation	17.7		34.8			37.6		

Source: Field Visit, 2022

The air quality of the SPA was found within the range of national ambient air quality standard while noise was found above noise quality standard because of the vehicular noise nearby the settlement area.

Bheri River lies about 500m far from tapping point. Perennial stream and Kokola stream lie about 700 m far from the proposed substation site. The physical parameter of the Bheri River was tested nearby tapping point.

Table 3-2: Water Quality of Stream along the Distribution Line Route

SN	DL/ SS	Location	Stream Name	Flood plain width (m)	DL distance from Stream	**Parameter-** *EXTECH ExStik II DO600*					
						Temp. (°C)	***Ref[7].***	***pH***	***Ref.***	***EC (µc/cm)***	***Ref.***
1.	DL	Bheri RM-13, Kudu (Ch. 0+000)	Bheri River	200	500m	22.8	<40°C	7.21	5.5-9.0	121	1500

Source: Field Visit, 2022

The water quality of the Bheri River was found to be within the limit of acceptance for the aquatic life in the stream. The water parameter data is compared with Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem. The construction activities of the Subproject components will not have impact to the local stream.

[5] *National Indoor Air Quality Standard, 2009*

[6] *National Ambient Sound Quality Standard, 2012*

[7] *Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem, 2019*

3.1.6 Solid Waste Management

Wastes were found littered in front of HHs and along the side of the access road near Subproject areas. People of the nearby area were found managing organic wastes within the household premises. Recyclable wastes (large quantity) were sold to scrap collector occasionally. The estimated quantity of solid waste generation from the labor camp is shown in **Table 3-3**.

Table 3-3: Estimated Daily Solid Waste Generation from Campsite

SN	Description	Calculation	Remarks
1.	Total Labors within the Campsite	= 20 Labors	
2.	Total Waste Generation to be Expected	= 20 * 123.62 g/capita/day = 2472.4 g/capita/day = 2.4724 kg/day	
3.	Organic Waste Composition Responsible for Foul Smell, and Rodents	= 1.26 kg/day	Assuming 51% organic waste
Rest other waste is recyclable, and non-decomposable which could be stored for long period and have less impact on the environment if properly managed. The amount of organic waste is manageable within the Subproject site as organic waste per day will be expected to be only 1.26 kg/day.			

3.2 Biological Environment

The proposed substation area land is private land. The land is barren and no issues of tree loss in substation area. The proposed 33 kV distribution line passes from the edge of Jungle Danda Community Forest (CF), Timure Danda CF, Budhe Dhungaa CF, Jagatipur CF, Deuli Danda CF, Bhagbati CF, Bohara CF, Syala Pakha Kale Gaun CF, Dara Bhadale Pakha CF, Patal Deurali CF, Bastola CF, Mayur Pankhi CF, Masara CF, Banjh Bisauna CF, Khurpa CF and Chhum Patal CF. The proposed Subproject lies within the elevation range from 735 to 2150 masl of Jajarkot District and thus is located in sub-tropical bioclimatic zone.

The vegetation species recorded during the screening field visit are: Sal (*Shorea robusta),* Botdhayero (*Lagerstroemia parviflora*), Aamala (*Emblica officinalis*), Jamun (*Syzygium cumini*), Bhalayo (*Semecarpus anacardium*), Fern (*Tectaria coadunata*), Rohini (*Mallotus philippensis*), Chir pine (*Pinus roxburghii*), Banmasa (*Lanatana camara*), Banmara (*Ageratina adenophora*), Pipal (*Ficus religiosa*), Rhododendron (*Rhododendron arboretum),* Mayal (*Pyrus pashia*), Kafal (*Myrica esculenta*), Chutro (*Berberis aristata*), Utis (*Alnus nepalensis*), and Banj (*Quercus leucotrichophora*).

Similarly, wild animal recorded during the public consultation are: Barking Deer (*Muntiacus muntjak*), Marsh Rabbit (*Sylvilagus palustris*), Jackel (*Canis aureus*), Malayan Porcupine (*Hystrix brachyuran*), Ghoral (*Naemorhedus goral*), Rato Badar (*Macaca mulatta*), Wild Boar (*Sus scrofa*), and Malsapro (*Yellow throated marten*). Altogether ten species of birds were noted around the surrounding project area; House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Eagle (*Haliaeetus leucocephalus*), Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer*

montanus), Kalij (*Lophura leucomelanos),* Jureli *(Hypsipetes leucocephalus),* Rock Pigeon *(Columbia lebia),* and Chyakhura *(Alectoris chukar).* All these bird species are of least concern under IUCN categorizations.

The Dhorpatan Hunting Reserve lies at a distance of 50 km from the proposed substation site, thus there will be no any impact to the protected species of the protected area. The proposed 33 kV distribution line passes through the 16 different community forests as shown in **Table 3-4**. A total of 14.82 ha of the forest area will be occupied by RoW of proposed 33 distribution line. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 6,757.

Table 3-4: Forest type along the proposed distribution line

SN	Name of CF	Chainage	District	Municipality/RM	Ward No.
1	Jungle Danda	0+800-1+000	Jajarkot	Bheri Municipality	13
2	Timure Danda	1+400-1+600	Jajarkot	Bheri Municipality	12
3	Budhe Dhungaa	2+000-4+000	Jajarkot	Bheri Municipality	12
4	Jagatipur	4+400-5+200	Jajarkot	Bheri Municipality	11
5	Deuli Danda	5+600-7+100	Jajarkot	Bheri Municipality	5
6	Bhagbati	7+400-9+400	Jajarkot	Bheri Municipality	4
7	Bhagbati	10+600-11+600	Jajarkot	Bheri Municipality	4
8	Bohara	11+600-13+800	Jajarkot	Bheri Municipality	3
9	Syala Pakha Kale Gaun	14+200-15+000	Jajarkot	Bheri Municipality	3
10	Dara Bhadale Pakha	19+000-23+400	Jajarkot	Bheri Municipality	2
11	Patal Deurali	24+600-25+300	Jajarkot	Bheri Municipality	2
12	Bastola	25+400-28+200	Jajarkot	Bheri Municipality	2
13	Mayur Pankhi	29+400-30+200	Jajarkot	Kushe RM	5
14	Mayur Pankhi	30+600-31+200	Jajarkot	Kushe RM	5
15	Masara	32+000-33+400	Jajarkot	Kushe GaPa	5
16	Banjh Bisauna	34+400-35+000	Jajarkot	Kushe GaPa	5
17	Khurpa	35+000-35+800	Jajarkot	Kushe GaPa	5
18	Chhum Patal	37+400-42+100	Jajarkot	Kushe GaPa	7

Source: Field Visit, 2022

3.3 Socio-economic Environment

Demography and Ethnic Compositions: The proposed Subproject area lies in Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and Ward No. 5 and 7 of Kushe Rural Municipality of Jajarkot district. Jajarkot Khalanga is the nearest business market nearby the Subproject. The general demographic information of the affected Municipality and RM is presented in Table 3-3. The major ethnic compositions within the surrounding project area i.e., Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and Ward No. 5 and 7 of Kushe Rural Municipality are Dalit (33.4%), Chhetri (28.5%), Thakuri (21.8 %) and Magar (9.2%) of the total population of 23,811. Majority of people follow the Hindu religion and rest follow Buddhism and Christian religions. The Core Project Area (CPA) of the Subproject will not affect any indigenous people.

Table 3-3: General Demographic Characteristic of Subproject Municipality

S.N.	Local Level	Ward No	HH	Population		
				Male	Female	Total
1	Bheri Municipality	2	896	2346	2270	4616
2		3	422	1004	977	1981
3		4	560	1128	1254	2382
4		5	415	1039	1050	2089
5		11	596	1523	1606	3129
6		12	461	1121	1211	2332
7		13	384	813	1005	1818
8	Kushe RM	5	611	1680	1610	3290
9		7	357	1055	1119	2717
Total			**4702**	**11709**	**12102**	**23811**

Source: (CBS, Rural Municipality-Municipality Profile of Jajarkot District, 2018)

Road Accessibility: Subproject-Ward No. 2, 3, 4, 5, 11, 12 and 13 of Bheri Municipality and Ward No. 5 and 7 of Kushe Rural Municipality is connected to Chhinchu-Jajarkot-Dunai Road Section. The transportation facilities in this locality are good. It is 20-25 minutes to reach Municipality and RM office from the Subproject area.

Electricity Beneficiaries: The implementation of the Subproject will increase the electricity beneficiaries to 3922 HHs, 29 commercial purposes and 10 industries. This will expand the electricity supply in the Subproject area with clean energy sources.

Water and Sanitation: Tap/piped water is the main source of drinking water in the surrounding Subproject area. About 57.8% of the households in the proposed Subproject's area have access to tap/piped water. Almost all the houses in the area have some sort of toilet facility.

Health Facility: The nearest and easily accessible equipped health facility to the proposed Subproject is in Jajarkot Hospital at Thaple (Bheri Municipality, Ward No. 4) located at a distance of 200 m distance from proposed distribution line alignment and health post at Dhime (Kushe RM, Ward No. 5).

Communication: People of the Subproject have access with communication facilities mainly through mobile telephone services provided by both government and private sector. In the Subproject, people have access with local and national FM Radio networks and local newspaper facility.

Occupation: Agriculture is the main occupation of people in the Subproject area with nearly 63% contribution; small trade and business/enterprises and services are other occupation of people in the Subproject area. Intermittent tripping and voltage drop of electricity was adversely affecting irrigation of crops and daily household chores activities.

COVID-19: The coronavirus (COVID-19) pandemic has been defined as global health crisis; the virus has spread in almost all parts of Nepal. Heedful of its vulnerabilities, the Government of Nepal had enforced a nationwide lockdown in 2020/2021 and activated its federal, provincial and local level mechanisms to respond to the crisis. In case of any sudden surge or outbreak of COVID-19, quarantine facilities and immediate health support should be provided to the workers and personnel involved in construction.

Other seasonal and minor diseases like dengue, fever, sneezing, cough, gastritis, diabetes and mental disorder have been reported within the Subproject area.

4. ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

The environmental and social impacts predicted during the construction of proposed Subproject are discussed in this chapter. National Environmental Impact Assessment Guidelines (GoN, 2050) has been referred for the predicting of magnitude, extent, and duration of the project-induced environmental impacts in Subproject area. This chapter identifies the basic environmental and social impacts in the Subproject area that will arise during the construction. The detailed impacts of each domain of environmental and social safeguards have been addressed in this chapter.

4.1 Anticipated Beneficial Impacts

Construction Phase

4.1.1 Local Employment

Local employment will be created during the construction phase. As mentioned in section 2.8 Workforce Requirement, the typical construction team will have 21 skilled manpower and 58 unskilled manpower for the period 10-12 months for the erection of poles and stringing the distribution lines and 16-18 months of time for the building of the substation. The local people within the SPA and OPA will be encouraged for employment during construction phase. Both male and female will get equal opportunity during construction. Based on the skill levels (skilled, semi-skilled and unskilled labor) local people will be used for the construction as far as possible. *The magnitude of impact is considered moderate, the extent is local, and the duration is short-term.*

Operation Phase

4.1.2 Local Economy and Enhancement in Rural Electrification

The local economy will benefit through improved reliability of electricity supply, which is a necessary condition for economic growth. Different industries within/nearby the proposed Subproject area will be established. Intermittent tripping and voltage drop problem nearby the settlement areas will be reduced. Upgrading and expansion of electricity distribution helps to way-out many electricity related issues and promotes the use of new types of home appliances, use of electric motors for irrigation, and establishment of small and large industries. *The magnitude of impact is considered high, the extent is local, and the duration is long-term.*

4.1.3 Greenhouse Gas Emission Balance

Net Green House Gas (GHG) emissions resulting from the Subproject area are expected to be low as the distribution lines will improve and expand electricity supply from clean energy sources. It will reduce the emission of GHG from the traditional source like Guitha (made from cow dung), firewood and timber along with commercial fuel Kerosene for cooking/lighting, heating and diesel for water pumping. *The magnitude of impact is high, the extent is local, and the duration is long term.*

4.2 Anticipated Adverse Impacts

A. Physical Environment

Construction Phase

4.2.1 Change in Land Use

The Subproject requires about 0.63 ha land for the substation. The proposed substation land area is private land. The land will be converted to the substation area surrounded by proper boundary wall. Distribution Line passes through private land, Community Forest and along the right of way of the road. The construction of the Subproject will bring change in land use permanently. Potential impacts caused by distribution lines will be limited to approximately 0.22 m of land for each pole, at the edge of private land. *The impacts due to use of land will be moderate in magnitude, site specific and long term in duration.*

Mitigation Measures

- Steel Tubular Pole for distribution lines will be planted at the right way of existing road without hampering traffic movement. In case of cultivated land, minimal land will be used at the edge for planting the poles.
- Cropping calendar will be followed while planting poles and stringing of conductors so that standing crops will not be damaged.
- In case of loss of standing crops, compensation will be made to the respective land owner as per the prevailing market rate.

4.2.2 Erosion and Landslide

The proposed Subproject area DL have the stream crossing on Ibragad Khola, Pasangad Khola, Khoch Khola and Khahare Khola and is susceptible to high erosion from landslide during rainy season. The distribution line length is 42.5 and about 0.4 km length passes from the landslide prone zone. The proposed DL will pass through the edge of Chhinchu-Jajarkot-Dunai Road Section up to Syala and follow cultivated land, settlement area and community forest area. The possible landslide is during the rainy season resulting erosion nearby the DL alignments. *The magnitude of impact is considered moderate, the extent is site-specific, and the duration is long-term.*

Mitigation Measures

- Concrete foundation is recommended for steel tubular pole installation for 33 kV lines,
- Pit hole prepared for the installation of steel tubular pole shall not be left open as possibility of accident may arise.
- Protection work along the eroded section of the Ibragad Khola, Pasangad Khola, Khoch Khola and Khahare Khola of the distribution line stretch.
- The client need to coordinate with local level governments and request the local government to give priority for the embankment activities for the protection of cultivated land and proposed 33 kV distribution lines.

4.2.3 Air Quality

The impact on air quality during the construction period is expected to be insignificant, as site clearance, excavation, stockpiling of construction materials, waste burning at camp

sites and equipment installation are localized and of short term. Transportation of the materials and movement of construction crew and equipment will have minor impact on air quality. *The impact on air quality will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors' vehicles and equipment should meet Nepali vehicle emissions standards.
- Dust emissions shall be controlled with using water sprays on earthen roads nearby settlements in substation area.
- Open burning of wastes should be strictly prohibited.
- Construction workers should use face masks at all times.
- All dust generating loads carried in open trucks should be covered.

4.2.4 Noise

Noise is inevitable during construction. As noted in section 3.1.5, noise is less around the substation area as the area is rural and settlement is sparse. Construction-related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites; construction related noise is not expected to exceed acceptable levels. *The impact on noise level will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors will be required to monitor noise during the construction.
- For substation site, a boundary walls serve as noise barrier, and it should be constructed as early as possible.

4.2.5 Drainage and Water Quality

Substation sites of 0.63 ha. will result in slight alteration of drainage patterns, although the alterations in drainage will not be quantifiable. Interference with drainage patterns will be temporary during construction phase only. The impact on water quality during the construction period is expected to be insignificant. Water will be used primarily as a cement additive for construction of substation foundations and boundary walls, and to control dust. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Storm water run-off from substation sites will be minimized and controlled with bunding temporary dikes (constructed boundary walls will also help contain run-off water).
- Proper management of ground drainage from camps as a preventive measure against breeding places of mosquitoes, and other pests.

4.2.6 Soil and Muck

As the proposed substation land's ground level is low, filling of soil is necessary. The required filling materials shall be purchased from nearby authorized crusher plant approved by local government. For distribution lines the excavation activity will be insignificant. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Soil required for filling shall be purchased from the nearby authorized crusher plant under local government.
- Soil shall be covered with tarpaulin while transporting it from earth-borrowing areas.
- Simultaneous water sprinkling and compaction of spoil shall be done using the roller.

4.2.7 Solid Wastes

The wastes generated during construction within the Subproject area are cement bags, iron bars, and other leftover construction materials, and waste generated by the labor camp. It might cause adverse impact if not properly managed. Organic wastes generated from labor camp may give foul smell and attract rodents if not manage properly. Inorganic wastes generated during implementation shall be managed through source segregation. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Source segregation of organic and inorganic wastes in different storage areas or facilities in the designated location.
- The organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered by thick layer of soil on daily basis.
- Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix shall be used as refills for ground leveling.
- Packing materials used for casing components should be recyclable.
- Recyclable wastes like left out/non-usable reinforcement bars and packing materials shall be sent or sold to scrap vendors.
- Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container and sealed carefully.
- Effective coordination shall be done with local level government for proper waste management during construction period.

Operation Phase

4.2.8 Electric and Fire Hazard

Employees performing servicing or maintenance of substations may be exposed to electric shock, burns and injuries from the unexpected energization or release of stored energy in the equipment. *The magnitude of impact is considered moderate, the extent is site-specific, and the duration is long term.*

Mitigation Measures

For this, the following mitigation measures will be practiced:

- Use of insulation, guarding, grounding, electrical protective devices, and safe work practices is advised.
- Boundary walls and security fences around substation are recommended to prevent unauthorized access.
- Only trained and authorized personnel shall be allowed for electrical works.
- Warning signs shall be installed.

B. Biological Environment

The proposed Subproject avoids forest area and other sensitive biodiversity area. Hence, there will be no significant impact to biological environment because of construction of substation and distribution lines.

Construction Phase

4.2.9 Loss of Habitat

As the proposed substation area is a barren land and no issues of tree loss in substation area, whereas the 33 kV distribution line passes through the edges of road alignments, farm lands and forest areas. The total area of the forest area that will be occupied within RoW of the proposed 33 kV distribution line is 14.82 ha. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 6,757. The possible use of firewood should be restricted during the construction activities. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long term.*

Table 4-1: Detail of impacted forest area and trees loss

Area (ha)			Name of species	No. of trees	
33kV line	Substation	Total		33kV line	Substation
14.82	-	14.82	*Shorea robusta*	4159	-
			Lagerstroemia parviflora	270	-
			Mallotus philippensis	30	-
			Semecarpus anacardium	333	-
			Emblica officinalis	136	-
			Ficus religiosa	15	-
			Alnus nepalensis	423	-
			Rhorodendron arboretum	317	-
			Syzygium cumini	106	-
			Quercus leucotrichophora	30	
			Pyrus pashia	45	
			Myrica esculenta	91	
			Pinus roxburghii	801	
			Total	**6757**	

Mitigation Measures

- Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019).
- Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.
- Workers and staffs should be restricted to use firewood for cooking.

- Providing LPG based stoves in Labor camp.
- Labors and staff shall be made aware to avoid illegal activities in adjoining forest.

Operation Phase

4.2.10 Bird electrocution and collision

The Subproject area is located in a rural setting and there is no presence of critical habitat of avian fauna. Electrocution is a risk to bird species that perch on power line infrastructures (substations and distribution lines). List of birds presented in section 3.2 may collide to distribution lines and substation. Minimizing bird collision and electrocution risk is therefore a win-win for biodiversity and the power sector. *The magnitude of impact is low, the extent is site-specific, and the duration is long term.*

Mitigation Measures

- Bird guards should be installed above the poles and white spirals in the conductors to improve visibility electrical structures.

C. Socio-Economic and Cultural Environment

The anticipated impacts regarding the socio-economic and cultural environment associated with Subproject are discussed below:

Construction Phase

4.2.11 Land Requirement

The land required for the proposed substation area is 0.63 ha, is the private land, that will be managed by NEA later. This has been confirmed officially through Ward Office, Bheri Municipality. NEA is given the right to use the land to build and operate a substation. There will be no issues of land requirements for the pole erection and for the distribution line people have suggested to install poles at the edge of farm-lands, without affecting any private structures along the distribution line. But the proposed substation land is private land, so there is necessity of land acquisition which issues will be fulfilled by Resettlement Plan. For the construction of distribution lines, owners of private land along the route have assured and committed for necessary help and support during implementation. They have agreed on NEA's proposal that poles shall be installed on the edge of cultivated lands and appropriate compensation for the loss of crops shall be given (**Annex 5**). Compensation shall be made on the basis of crops types and quantity of loss equivalent to the market price. *The impacts will be low in magnitude, site specific, and long term in duration.*

Mitigation Measures

- Distribution pole of diameter 0.22 m should be installed on the edge of cultivated land making no loss of standing crops.
- If there is loss of crops, appropriate compensation shall be made.

4.2.12 Public Health

Construction activities will be of small scale, causing no significant adverse impact to existing quality of air, water and sound. Local people except the workers do not involve in construction activities. Considering COVID-19 pandemic as an example, workers will be

advised to avoid unnecessary contact with local people. *The magnitude of impact is low, the extent is site-specific, and the duration is short term.*

Mitigation Measures

- Contractors shall implement health and safety plans.
- Awareness on HIV/AIDS and other sexually transmitted disease should be provided to the labors.
- Awareness on basic sanitation and waste management should be provided to the labors.

4.2.13 Occupational Hazards and Safety of Workers

Occupational health hazard and safety of workers is the major issue during the construction period. Working without adopting safety measures during excavation work, spoil management work, mechanical and electrical equipment handling activities, chemical handling, etc. during construction may call the risk of accident. Primary victims are the workers involved in the construction. *So, the envisaged direct impact is high in magnitude, site specific in extent, short term in duration.*

Mitigation Measures

- Contractor shall prepare the Environmental, Health and Safety plan and take approval from the Client (NEA/PIU). Contractor shall employ Safety officer during construction period.
- All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. The Contractor will adhere to labor Act 2074 and Labor Rules 2075.
- The basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid are required for the campsite.
- All the workers shall have health insurance over the period of construction.
- Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs) as shown in ***An*nex 7**.
- NEA will be responsible to supervise the EHS performance of the construction Contractor, and worker's health and safety.

4.2.14 Child Labor, and Gender Issues

During the construction period, people employed on daily wages for excavation, transportation of construction materials, and other construction-related works should avoid the involvement children and should avoid gender discrimination. Gender discrimination may occur as the Contractor may not be sensitive towards gender equity. Contractors should equally pay men and women workers. Construction area should be gender friendly with required facilities. *The envisaged impact is high in magnitude, site-specific in extent, and short-term in duration.*

Mitigation Measures

The Subproject will ensure to:

- Provide equal wage to male and female for similar nature of work.
- Restrict use of child labor i.e., below 16 years of age (which is as per government and ILO guidelines).

- Provide female friendly construction environment with separate cabins and toilet for women in the camp.
- Prepare suitable work categorization for women.

4.2.15 Socially Undesirable Activities

The workers may use alcohol and other forms of intoxication, gamble and quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities in and around the project area. *So, the envisaged impact is low in magnitude, local in extent, and short-term in duration.*

Mitigation Measures.

- Restrict movement of workers out of camp after dinner time in the night.
- Prohibit the use of alcohol and gambling in the camp.
- Supply water supply, daily consumable items, communication facility in the camp so as not to create additional pressure on the local services.
- Orient workers to show respect to local tradition and culture.
- Prepare a code of conduct for all project staff, orient them and monitor that these are effectively followed by all.
- Assign a public relation officer to keep close and regular consultation and coordination with local communities.
- Regular monitoring of workers' behavior and take appropriate measure on rule violators.

Operation Phase

4.2.1 Hazards and Safety

Occupational health hazard and safety of staffs is the major issues during the operation phase of the substation. The possible electric shock and fire hazard might cause injury or death to working staffs thus the protection measures should be taken all the time. *The envisaged direct impact is high in magnitude, site specific in extent, long term in duration.*

Mitigation Measures

- There will be the use of insulation, guarding, grounding, electrical protective devices, and safe work practices.
- Boundary walls and / or security fences around substations to prevent unauthorized access.
- Only trained and authorized personnel will be allowed for the electrical works.
- No electric wire shall be stringed above the house.
- Security fences around the substation.
- Establishment of warning signs
- Shutdown shall be taken during work on DL route

4.2.2 Electric and Magnetic Field Effect

Electric power distribution lines create electric and magnetic field together, referred to as electromagnetic fields (EMF). Electrical flux density declines in inverse proportion to the

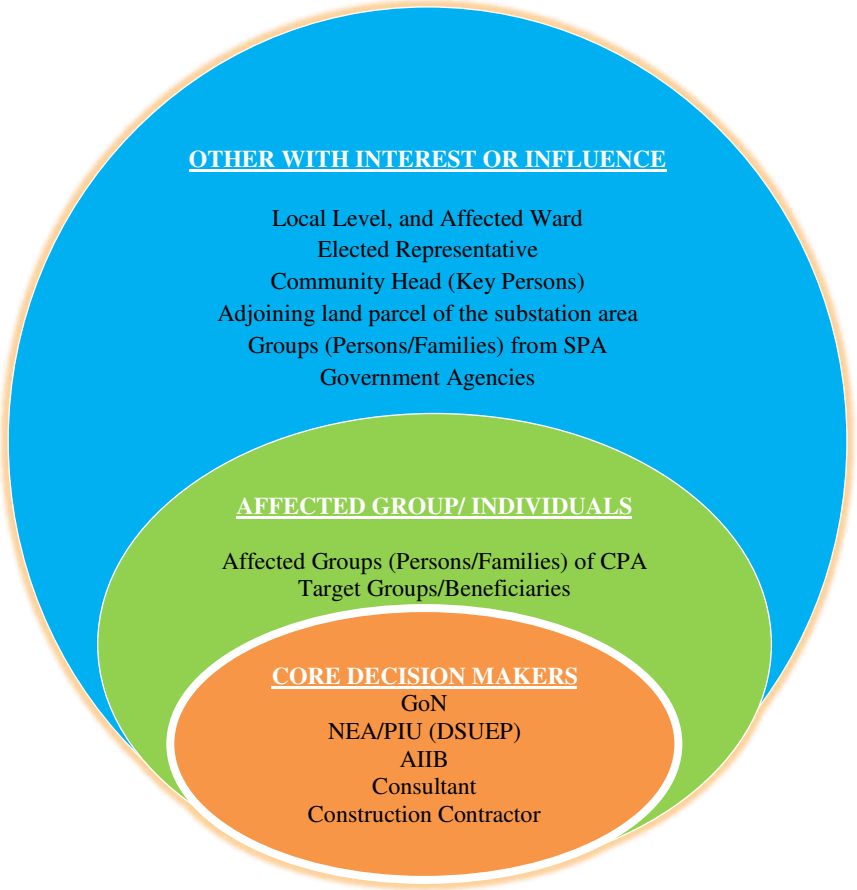
square of the distance and magnetic fields decline in inverse proportion to the cube of the distance; so, there will be no impact outside of the substation boundaries. [8] Research on the long-term effects of EMF associated with distribution lines is inconclusive with respect to health risks. As noted in the World Bank EHS guidelines for transmission and distribution systems, there is no empirical data demonstrating adverse health effects from exposure to typical EMF levels from power transmissions lines and equipment.

5. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

5.1 Methodology in Information Disclosure, Consultation and Participation

The following methodologies were followed for information disclosure, consultation and participation:

i. Identification of the stakeholder is important to understand how the Subproject activities will engage with different institution/groups/individuals. The stakeholders are the groups that might be affected by the Subproject or might influence Subproject outcomes. The identified stakeholders are considered in three groups (**Figure 5-1**).



[8] E.g., at a distance of 10 meters from a single distribution line or conductor, electrical flux density drops to 1% of the field strength at a distance of 1 meter from the conductor: 1/ (10*10) = 1%. Likewise, the magnetic field drops to 0.1% of the field strength at the conductor: 1/ (10*10*10) = 0.1%.

Figure 5-1: Identified Stakeholder in the Subproject[9]

i. The notice with subject of consultation, venue, and time was pasted at Subproject footprint area, local level and affected Ward office in presence of concerned local stakeholders (**Annex 1**). People were explained about the notices and their views were noted and agreed as Minutes.

ii. Study team members visited all the local government offices within the Subproject influence area. Representatives from each local body were also consulted. All local governments were given request letters for their active support in project implementation. Municipalities were requested to provide written suggestions. The deed of enquiry (Muchulkas) and Letter of Declaration from the stakeholders are presented in **Annex 6 and Annex 7**.

iii. Local communities nearby substation area and along the distribution line routes were consulted, and were briefed about the Subproject activities and likely benefits with their suggestions (included in the Minutes).

iv. During the Subproject construction phase, booklets informing about the Subproject activities, likely impacts and mitigation measures together with the complaints handling mechanisms will be developed and distributed in the Subproject area.

5.2 Consultation and Information Disclosure

Consultation aims to encourage participation of stakeholders and communities of the Subproject area in identification of issues, comments and suggestions. The Subproject affected groups (persons/families) were given more emphasis during the field consultations. Public consultations were conducted at Bheri Municipality, Kudu (Ward No. 13) on 13th February, 2022, Tharpudada (Ward No. 12) on 29th January 2022, Kukhurakot (Ward No. 11) on 31st January 2022, Gairikhali (Ward No. 4) on 1st February 2022, Thaplechaur (Ward No. 3), Bhaunthana (Ward No. 2) on 9th February 2022, and Pokhara (Ward No. 2) on 8th February 2022. Similarly, Kushe Rural Municipality, Panchkatiya (Ward No. 5) on 8th February 2022, Damdala (Ward No. 5) on 8th February 2022, Dhime (Ward No. 5) on 7th February 2022, Khurpa (Ward No. 5) on 7th February 2022, Jahargaun (Ward No. 5) on 6th February 2022 and Thinkethala (Ward No. 5) on 5th February 2022 (**Figure 5-2**). The concerns expressed and issues/ raised during the consultation were documented as in the form of minutes (**Annex 5**).

[9] *Referenced Meaningful stakeholder engagement: a joint publication of the MFI working group on environmental and social standards / Reidar Kvam, PP-19, 2019.*

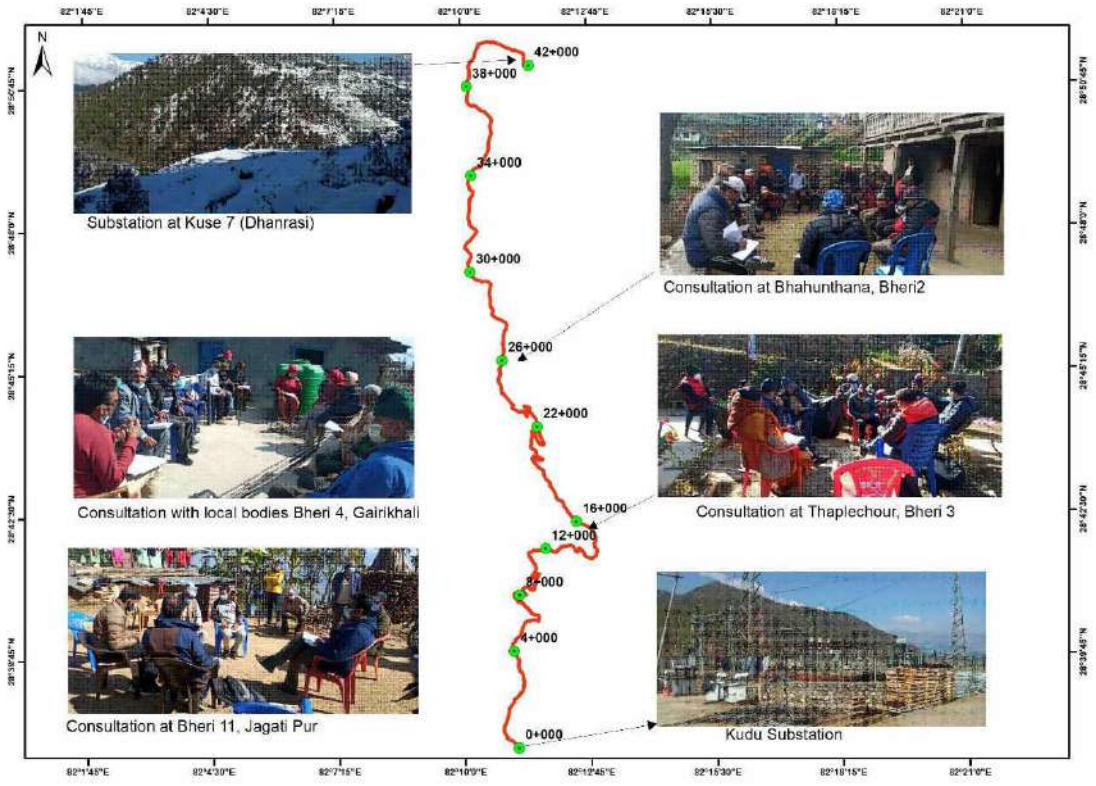


Figure 5-2: Consultation with the stakeholders and communities in the Subproject Area.[10]

Major benefits expected from the implementation of Subproject through the perspective of local people were identified from public interaction, and that included improvement in the rural electrification facilities ensuring the uninterrupted electricity in the households and better functioning of industries in the locality. The issues, comments and suggestions received in the consultation are presented in **Table 5-1**.

5.3 Comments and Suggestion Received

Table 5-1: Summary of issues, comments and suggestions received in Consultations

Source: Field Visit, 2022

Date	Location	Issues, comments and suggestions received	Participants
5th February 2022	Bheri Municipality, Ward No.13, Kudu	• The distribution line should be installed away from the settlements area and private land. In case if it has to be passed through the private land, the pole should be installed at the edge (the up and down the side of the land). • The local people should be given priority for the employment based on the knowledge and skill in the construction of the project.	17,0F-17M
29th January 2022	Bheri Municipality, Ward No.12, Tharpudada		25,16F-9M

[10] *Field Study, 2021. Used SW Map and GIS*

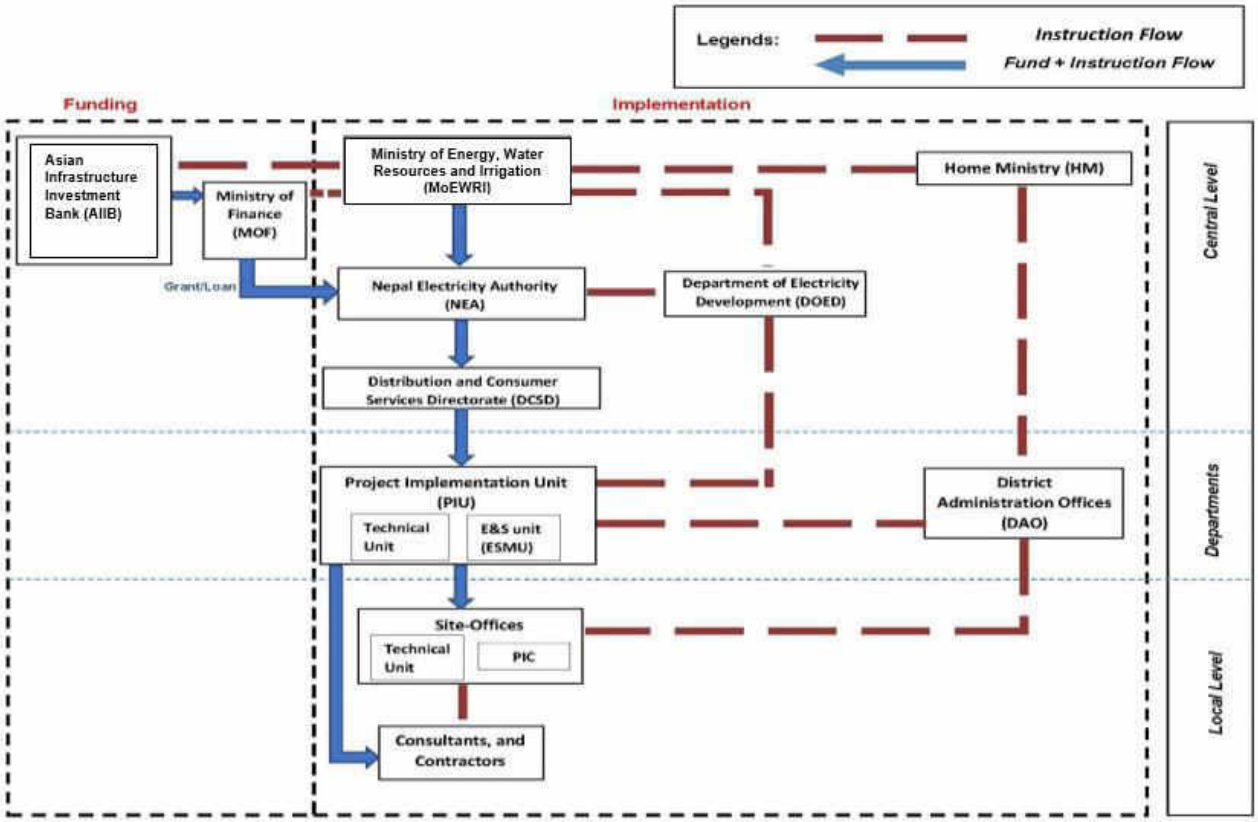
Date	Location	Issues, comments and suggestions received	Participants
31st January 2022	Bheri Municipality, Ward No. 11, Kukhurakot	• The project should compensate the damage of private properties (crops and trees) caused by expanding the distribution line. • While constructing the sub-project, there should not be any negative impacts on archaeological, religious momentous, or to any structures of public importance. • It is informed that there are no residences of indigenous people within the direct project affected area. • There is electricity supply with inadequate voltage in this area. It is requested that the project should start its construction immediately to ensure reliable electricity service to the local people • The construction of this proposed sub-project will have the support and cooperation of local people and stakeholder. • It is informed that there are no any places of ritual and cultural importance in the project area.	17,5F-12M
1st February 2022	Bheri Municipality, Ward No. 4, Gairikhali		15,3F-12M
2nd February 2022	Bheri Municipality, Ward No. 3, Thaplechaur		9,2F-7M
9th February 2022	Bheri Municipality, Ward No. 2, Bhaunthana		25,3F-22M
8th February 2022	Bheri Municipality, Ward No. 2, Pokhara		22,8F-14M
8th February 2022	Kushe Rural Municipality, Ward No. 5, Panchkatiya		28,9F-19M
8th February 2022	Kushe Rural Municipality, Ward No. 5, Damdala		16,1F-15M
7th February 2022	Kushe Rural Municipality, Ward No. 5, Dhime		20,3F-17M
7th February 2022	Kushe Rural Municipality, Ward No. 5, Khurpa		45,16F-29M

Date	Location	Issues, comments and suggestions received	Participants
6th February 2022	Kushe Rural Municipality, Ward No. 5, Jahargaun		26,12-14M
5th February 2022	Kushe Rural Municipality, Ward No. 5, Thinkethala		31,2F-29M

6. INSTITUTIONAL ARRANGEMENT AND GRIEVANCE REDRESS MECHANISM

6.1 Institutional Arrangement

The Ministry of Energy, Water Resources and Irrigation (MEWRI) is responsible for overall planning and execution of the plans for the overall development of water and energy sector in Nepal. Nepal Electricity Authority (NEA) under MEWRI is the responsible agency for the implementation of the DSUEP. The project comes under Distribution and Consumer Services Directorate (DCSD) of NEA. Project Implementation Unit (PIU) under DSUEP is the implementing unit of the project. Environment and Social Management Unit will be within PIU. All the resources needed for the EMP implementation for the construction and operation phase will be provided by the PIU. The site offices under PIU will have the supervision consultant with environmental and social safeguard specialist, who will be responsible for compliance monitoring activities during the construction phase. He will also provide technical support in preparing the monitoring report.



Source: ESMF-DSUEP

Figure 6-1: Institutional Arrangement for Environmental and Social Management

Contractor shall have the main responsibility to ensure the compliance. The Contractor shall prepare an Environment, Health and Safety (EHS) report that would be approved by DSUEP/PIU before field mobilization. They need to strictly follow the EHS plan requirements. Contractor shall urgently comply with corrective actions for any noncompliance as instructed by PIU. The ESMU of PIU shall provide safeguard compliance orientation to all environment monitors and safeguard team of the contractor, one month before the construction works start.

6.2 Grievance Redress Mechanism

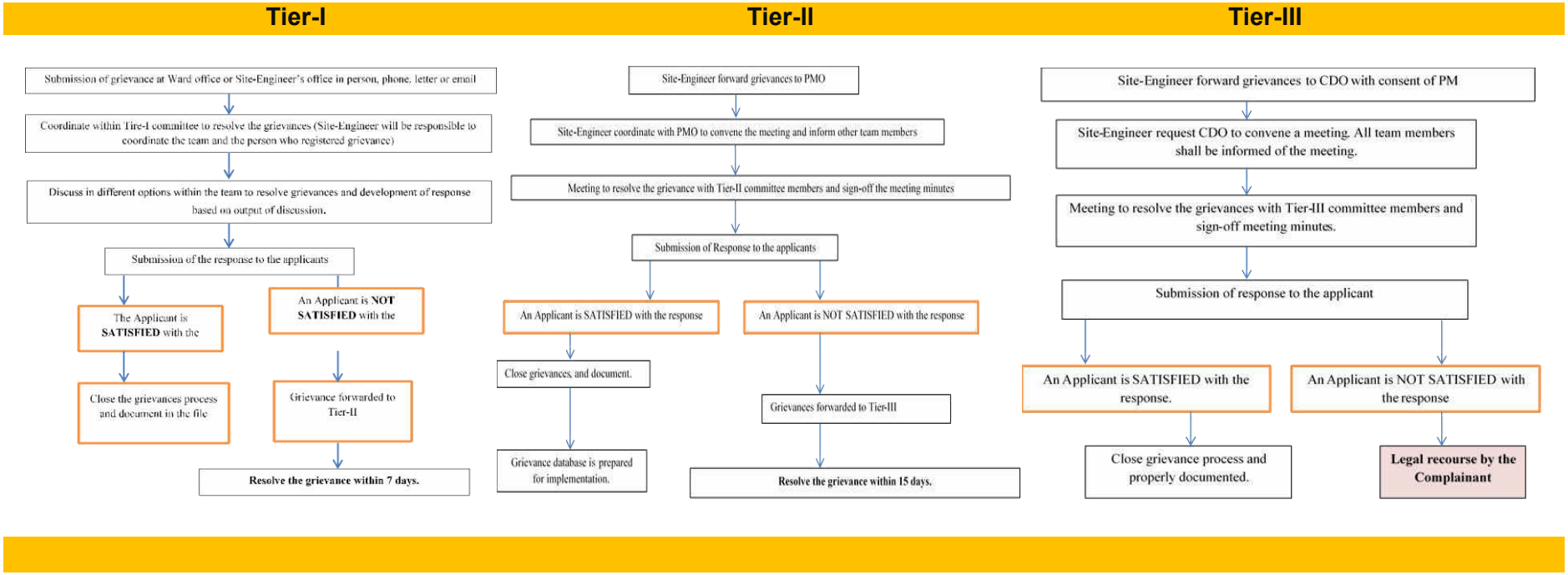
The Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental related issues at the subproject level. The GRM is designed to be simple, transparent and responsive. GRM shall address only the concerns arising due to the project implementation activities, mainly during construction stage. Social Comment Addressed -In each subproject, three levels Grievance Redress Mechanism will be established. During the ESMP study period NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the subproject level. Till date NEA has established Tier-I and Tier-II GRM has been established at local wards level and Municipality/RM level. Tier-II will be established before construction work start.

GRM process entails the concerned party submitting a grievance either in-person, or via phone, letter, or email to the Site-Engineer or the concerned Municipality Chief or the concerned Ward Chair. The Site-Engineer will record such complaint. In cases where Ward Chair has received such grievance, he/she should forward the grievance to the field office Engineer. The Site-Engineer shall notify the committee members of Tier-I and arrange meeting to resolve the received grievances. If not resolved such grievances will be carried to Tier II and Tier III. The three levels of GRM will be based on time-bound schedules as mentioned in **Table 6-1**. The subproject will carry the regular meeting for Tier-I, once a month to follow up if any grievances are received or not and to resolve the grievances received and update its status to PIU. **Figure 6-2** describes the Workflow Diagram of GRM for the subprojects.

Table 6-1: Levels of Grievance Redress Mechanism Based on Time Bound

Provisions	**Levels of Grievance Redress Mechanism**					
	First Level (Tier-I)		**Second Level (Tier-II)**		**Third Level (Tier-III)**	
Level	Local Level		Project Manager Office (PMO) headed by the Project Manager (PM) at Project Implementation Unit (PIU)		District Level	
Supervisory	NEA Site-Engineer		PMO		Chief District Officer (CDO)	
Assistance	Chief/Mayor of Concerned Local Level and Chairperson/ Representative of Ward, Construction Contractor's (CC) Representative and Project Supervision Consultant's (PSC) Safeguards Officer		NEA Site-Engineer and PSC's Social Expert, and Construction Contractor		PMO, affected persons, representative from Rural Municipality/Municipality, Site-Engineer, PSC's Social Expert. *If deemed necessary, representative from Forest Office, representative from Land Revenue Office, and representative from Land Survey Office are invited.*	
Days for Resolving Complain	7 days of receipt of a complaints/ grievance		15 days of complaints forwarded by Site-Engineer		15 days	
Committee Members	**Committee Member**	**Designation**	**Committee Member**	**Designation**	**Committee Member**	**Designation**
	Municipality Chief	Coordinator	Project Manager	Coordinator	Chief District Officer (CDO)	Chair
	Site-Engineer-NEA	Member secretary	Site-Engineer	Member Secretary	Project Manager	Coordinator
	Safeguards Expert from Consultant	Member	Municipality Chief	Member	Site-Engineer	Member Secretary
	Contractor Engineer	Member	Safeguards Expert from Consultant	Member	Municipality Chief/Ward Chair	Member
	Ward Chair	Member	Contractor Engineer	Member	Safeguards expert from consultant	Member
					Contractor Engineer	Member
					Representative from affected people	Member

Figure 6-2: Workflow Diagram for GRM from NEA[11]



***** Affected People (AP) have the right to refer the grievances to appropriate courts of law if not satisfied with the redress at any stage of the process i.e., the AP will have the choice to approach country's judicial system.

[11] *Grievance Redress Mechanism (GRM) Prepared for the sub-projects financed by Asian Infrastructure Investment Bank (AIIB) under Distribution System Upgrade and Expansion Project (DSUEP), Nepal Electricity Authority (NEA), May 2021.*

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Environmental and Social Management Plan and Mitigation Measures

The overall Environmental and Social Management Plan of the Subproject is presented in **Table 7-1**. The ESMP will be implemented in three stages: (i) pre-construction (ii) construction, and (iii) operations and maintenance. This ESMP is living document and will be updated and modified under the supervision of ESMU of PIU.

Table 7-1: Environmental and Social Management Plan (ESMP)

Project Activity	Environmental and Social Issues	Management/Mitigation Measures	Mitigation Cost	Responsibility	
				Planning and Implementation	Supervision and Monitoring
Pre-construction Phase					
Approvals, permits and clearances	Installation of poles along the edge of private farm lands	• Site office and the contractor must inform the community prior to the installation of poles and stringing of the line along DL route	Cost will be included in the Resettlement plan	Site Office/ Contractor/	DSUEP (PIU)/NEA
Construction Phase					
Construction work in substation area and distribution line alignment	• Inadequate/unsafe working conditions	• Appropriate contract clauses to ensure satisfactory implementation of contractual environmental, health, and safety measures.		Site Office/Contractor	PIU/NEA
	• Erosion and Landslide at distribution line sections	• Protection work is required at land eroded sections at chainage 12+800 to 13+400	Cost to be incorporated in Community Development Plan (CDP)	Site Office	PIU/ NEA
	• Accident may arise if the pit hole (depth-2m and diameter-0.22 m) prepared for steel tubular poles remains open for	• Pit holes for the steel tubular pole shall not be left open and should be filled instantly by erecting poles and concrete-cement around the base, should be used to strengthen the pole erection • Contractors should follow the guideline	Project Cost	Contractor/ Site Office	PIU/ESMU/ PIU

	long time	provided by the PIU			
	• Dust emission - transportation of materials and movement of construction crews and equipment will cause minor impact	• Water sprays to be used for dust control as necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil) to be stored in substation area. • Steel poles firstly stocked in the substation area and secondly in the open barren area in coordination with Rural Municipalities and Municipalities. No social and environmental issues for the stockpiling of the steel poles and stringing wires	Air Quality Monitoring- 1,50,000.00 (NRs.) Sprinkling water (Dust Management) 2,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
	• Noise emission- Construction related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites	• Boundary walls serves as a noise barrier, and these shall be constructed as early as possible. • Construction equipment to meet national emissions and noise control standards.	Noise Level Monitoring- 50,000.00 (NRs.) Provision of PPE in Project Cost	Contractor/ Site Office	PIU/ESMU
	• Interference with drainage patterns will be temporary at substation during construction phase	• A proper drainage system should be managed within the substation area. • Storm water run-off need to be minimized and controlled with bunding temporary dikes • Drainage management as a preventive measure against breeding of mosquitoes and other pests	Project Cost	Contractor/ Site Office	PIU/ESMU

	• Possible erosion and flooding in Ibragad Khola, Pasangad Khola, Khoch Khola and Khahare Khola	• Concrete foundation is recommended for Steel tubular pole installation for 33 kV lines. • Pit hole prepared for the installation of steel tubular pole shall not be left open as possibility of accident may arise.	Project Cost	Contractor/ Site Office	PIU/ESMU
		• Protection work along the eroded sections in the on Ibragad Khola, Pasangad Khola, Khoch Khola and Khahare Khola, 20-30 m distance from the distribution line. • Client need to coordinate with local level governments to give priority for the embankment activities for the protection of cultivated land and proposed 33 kV distribution lines.	Cost from Local Government	Kushe RM and Bheri Municipality	Kushe RM and Bheri Municipality /PIU
	• Construction associated wastes generated within substation area and campsite location	• Organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered, by a thick layer of soil • Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix should be used as refills for ground leveling. • Recyclable wastes like left out/non-usable reinforcement bars, and packing materials to be sent or sold to scrap vendors. • Effective coordination with local level government for the proper waste management	Solid wastes management – 1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
	• Illegal fishing and	• Discouraged by supplying adequate food	Project Cost	Contractor/ Site	PIU/ESMU

	bird hunting by the labors	item (poultry) requirement within the camp. • Awareness on legal provisions upon illegal hunting of biodiversity need to be disseminated		Office	
	• About 14.82 ha. of forest area occurs within RoW of the DL • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 6,757	• Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019). • Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.	The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report	Contractor/ Site Office	PIU/ESMU
	• Use of firewood from nearby forests	• Workers and staffs should be restricted to use firewood for cooking. • Providing LPG based stoves in Labor camp.	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Loss of standing crops at pole installation locations (depth-2m and diameter-0.22 m)	• Pole to be installed at the edge of cultivated land making no loss of standing crops • Need to make prior consultation with landowner during installation of the pole and stringing of distribution lines • If there is loss of crops, appropriate compensation will be made by the project	Project Cost	Contractor/Site Office	PIU/ESMU
Environment, Health and Safety	• Injury and sicknesses workers and members of the public	• Contractor shall prepare the Environmental, Health and Safety plan and take approval from the client. Provision of safety officer in the work team shall be made during construction period.		Contractor/Site Office	PIU/ESMU

	• Potential fecal coliform contamination in drinking water	• All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. • Basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid shall be made available for the campsite. • Provision of health insurance to employees. • Security fences around the substation. • Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs). • Awareness on HIV/AIDS and other sexually transmitted disease. • Awareness on providing basic sanitation facilities and waste management control to the labors. • For coronavirus (COVID-19) pandemic situation, Contractors should arrange for quarantine and health services for infected workers.	Establishment of Labor Camp with basic facilities – In Project Cost EHS Awareness Trainings - 1,50,000.00 (NRs.) COVID-19 measures 2,00,000.00 (NRs.)		
Management of electric equipment's, toxic materials of chemical wastes	• Possible spills resulting in contamination of soil, water, and air	• Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container, and sealed carefully	1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
Operation and Maintenance Phase					
Electric shock and fire hazard	• Injury or death to the workers and public	• Use of insulation, guarding, grounding, electrical protective devices, and safe work practices. • Boundary walls and / or security fences around substations to prevent unauthorized access.	Project Cost	NEA	NEA

		• Only trained and authorized personnel shall be allowed for the electrical works. • No electric wire to be stringed above the house. • Installation of warning signs.			
Routine operations and maintenance	• Potential disturbance to other utility functions and vehicular traffic.	• Maintain warning / advisory signs in good and visible condition • Visual and technical inspection	Project Cost	NEA	NEA
Oil spillage	• Contamination of land/nearby water bodies	• Substation transformers should be stored within secure and impervious bundled areas with a storage capacity of at least 110% of the capacity of oil in transformers and associated reserve tanks.	Project Cost	NEA	NEA
Bird electrocution and collision	Electrocution can cause a risk to bird species which perch on power line infrastructures	Provision of bird guards above the poles and white spirals on the conductors to improve visibility	Project Cost	NEA	NEA

(*The provision of environment and social management cost should be included in the project cost making each items visible in BOQ of bidding document for the safeguard compliance by the construction contractor*)

7.2 Proposed Monitoring Plan

The monitoring proposed in **Table 7-2** will be of value primarily for establishing baseline conditions in the Subproject area, and then for ambient quality monitoring.

Table 7-2: Minimum Provisions for Environmental Monitoring

Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
Construction Stage				
Clearing of construction site	Substation boundaries	• Field inspection of Subproject Sites and ensure that appropriate safety measures are implemented	Clearing and restoration: weekly	Contractors to implement corporate EHS plan, drainage management and solid waste control in substation area.
Use of forest area and loss of trees	33 kV DL alignment	• Field inspection of Subproject sites and ensure the compensatory plantation of 1:10 • Related approval document for tree clearance	Prior to the construction work	Contractor responsibility under the supervision of PIU/DFO
Air: SPM, Noise: dB	Substation boundaries and nearest receptor to substation	• Spot check for noise and dust using portable monitoring device	Air, and noise: quarterly during construction period	Contractors need to conduct the air and noise monitoring during the construction period at the substation location

Construction wastes: on-site inspection	Visual inspection of active construction areas, including equipment staging areas and camps	• Spot check / visual inspection of solid waste (spoil, muck etc.) generation and disposal. • Analysis of transformer oils to determine if polychlorinated biphenyls are present.	Monthly spot checks for construction waste management	PIU safeguard officers to provide oversight via regular field inspections, and submit monitoring reports to the Bank
Occupational health and safety	Substation boundaries	• No. of Toolbox talk and safety orientation to the workers • No. of workplace accidents • Use of PPE by workers	Daily Inspection during construction Monthly Inspection during operation phase	Inspection of the construction site by safety officer and PIU safeguard officer
Child involvement in construction work (need to be prohibited)	Substation work	• Spot inspection at construction sites	Monthly Inspection during construction	Site Office

7.3 Environmental and Social Management Plan Cost

Preliminary cost estimates for the ESMP implementation are shown in **Table 7-3**. These estimates cover the basic monitoring activities and the mitigation measures to be complied from the contractor's side. The ESMP cost estimated for the **Kudu–Samaila Distribution Line** is NRs 13,00,000.00. The community support activities and the costs will be presented in the Community Development Plan (CDP). NEA has agreed for the effective implementation of the mitigation and monitoring cost items as mentioned in table below.

Table 7-3: Mitigation Measures and Monitoring Activities Cost Estimates

SN	Budget Items	Unit	Rate (NRs.)	Total Amount (NRs)
1	Air Quality Monitoring (at substation)	6 (Times)	25,000.00	150,000.00
2	Noise Level Monitoring (at substation)	6 (Times)	8,334.00	50,000.00
3	Sprinkling of water to be used for dust control necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil)	200 (Times) During Excavation and Civil works	1000.00	2,00,000.00
4	Management of electric equipment's, toxic materials of chemical wastes	-	L.S.	1,00,000.00
5	Segregation and management of solid wastes	-	L.S.	1,00,000.00
6	COVID-19 measures (considering pandemic situation) standardize the quarantine facilities with health aid to the labors	-	L.S.	200,000.00
7	EHS Awareness raising trainings to the labors	10 (Events)	15,000.00	1,50,000.00
8	Meeting of Safeguard Desk and Grievance Redress Committee at Field Level	24 (Months)	14,583.00	3,50,000.00
Total				**13,00,000.00**

8. CONCLUSION

Potential environmental impacts of this Subproject are not diverse and are all site-specific i.e., confined to the Core Project Area. Civil works will have minimal temporary impacts on air, noise and water quality. Erection of poles during construction shall follow right of way of existing roads and the edge of farmlands. The PIU should give prior information before installation of the poles. In the ESMP consultations conducted in the settlement area, people have agreed for the implementation of the Subproject and have suggested to install poles on the edge of farm-lands, without affecting any private structures along the distribution line. If there is loss of crops, appropriate compensation shall be provided. The implementation of the proposed Subproject needs 14.82 ha of forest area with estimated loss of 6757 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. Mitigation measures are suggested in this ESMP to avoid any possible environmental and social impacts. The total ESMP cost for this Subproject is NRs. 13,00,000.00. NEA Project Implementation Unit has agreed to implement the estimated cost for the mitigation measures and monitoring activities.

REFERENCES

CBS. (2019). Environmental Statistics of Nepal. Kathmandu: Central Bureau of Statistics.

CBS. (2018). Rural Municipality-Municipality Profile of Jajarkot District. Jajarkot: Office of Statistics.

DHM. (2021). Retrieved from http://mfd.gov.np/city?id=26

DoS. (2020). Data & Metadata. Retrieved from National Spatial Data Center: Geoportal: http://nationalgeoportal.gov.np

Environmental and Social Framework (ESF) Asian infrastructure investment Bank, Feb 2016 (Amended February 2019).

Environmental and Social Management Framework (DSUEP) NEA- November 2021

GoN (2019): Environmental Protection Act (EPA), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN (2020): Environmental Protection Rules (EPR), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN. (2050). National Environmental Impact Assessment Guidelines. National Planning Commission Secretariat.

GoN. (2019). Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, Ministry of Forests and Environment, Singhadurbar, Kathmandu.

Shahi, D. K., Rijal, H. B., & Shukuya, M. (2019). Study on Household Energy Usage Patterns in Urban and Rural Areas. Journal of the Institute of Engineering, 15 (No. 3), 402-410. doi:https://doi.org/10.3126/jie.v15i3.32761

Stakeholder Engagement Strategy, DSUEP, NEA 2019.

The White Paper. (2018). Energy, Water Resources and Irrigation Sector's Status and Roadmap for the Future. Kathmandu: Government of Nepal.

WBG. (2018). https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2018&locations=NP&start=1996&view=chart. Retrieved from https://www.worldbank.org.

WECS. (2014). Energy Data Sheet. Water and Energy Commission Secretariat. www.energyefficiency.gov.np/downloadthis/final_data_book__11_june_2014.pdf

ANNEXES

Annex 1: SAMPLE NOTICE FOR PUBLIC CONSULTATION AND GRM FORMATION LETTER TO STAKEHOLDERS

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक अध्ययन प्रतिवेदन तयारी सम्बन्धि सूचना

सूचना प्रकाशन मिति: .....

..... प्रदेश ..... जिल्ला .....(नगरपालिका/गाउँपालिका/महानगरपालिका/उपमहानगरपालिका) मा एसियन इन्फ्रास्ट्रकचर इन्भेस्टमेन्ट बैंकको ऋण सहयोग भएको नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना कार्यान्वायन हुनुभन्दा अघि सो आयोजनाले त्यस क्षेत्रको वातावरण तथा सामाजिक पक्षहरुमा के-कस्तो प्रभाव पार्दछ भनि स्थानीय सरोकारवालाहरु सँग छलफल गर्न आयोजना क्षेत्रका सम्पूर्ण सबै सरोकारवालाहरुको निम्न स्थान तथा समय उपस्थितिका लागि यो सूचना प्रकाशित गरिएको छ।

सार्वजनिक छलफल हुने स्थान, मिति र समय:

स्थान:

मिति:

समय:

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

(ए.आई.आई.बि.)

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

प.सं. ०७८/७९: 93८.

मिति: २०७८/१०/०७

श्री .....
.....

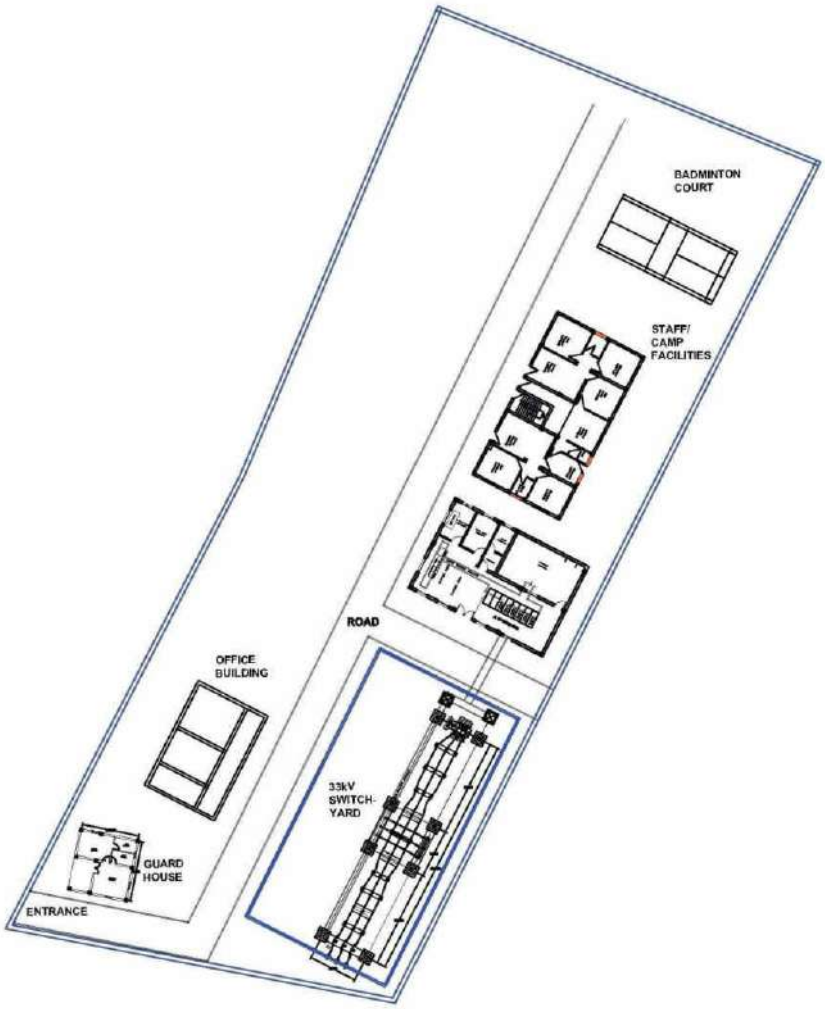
विषय: गुनासो समाधान संयन्त्र गठन भएको सम्बन्धमा।

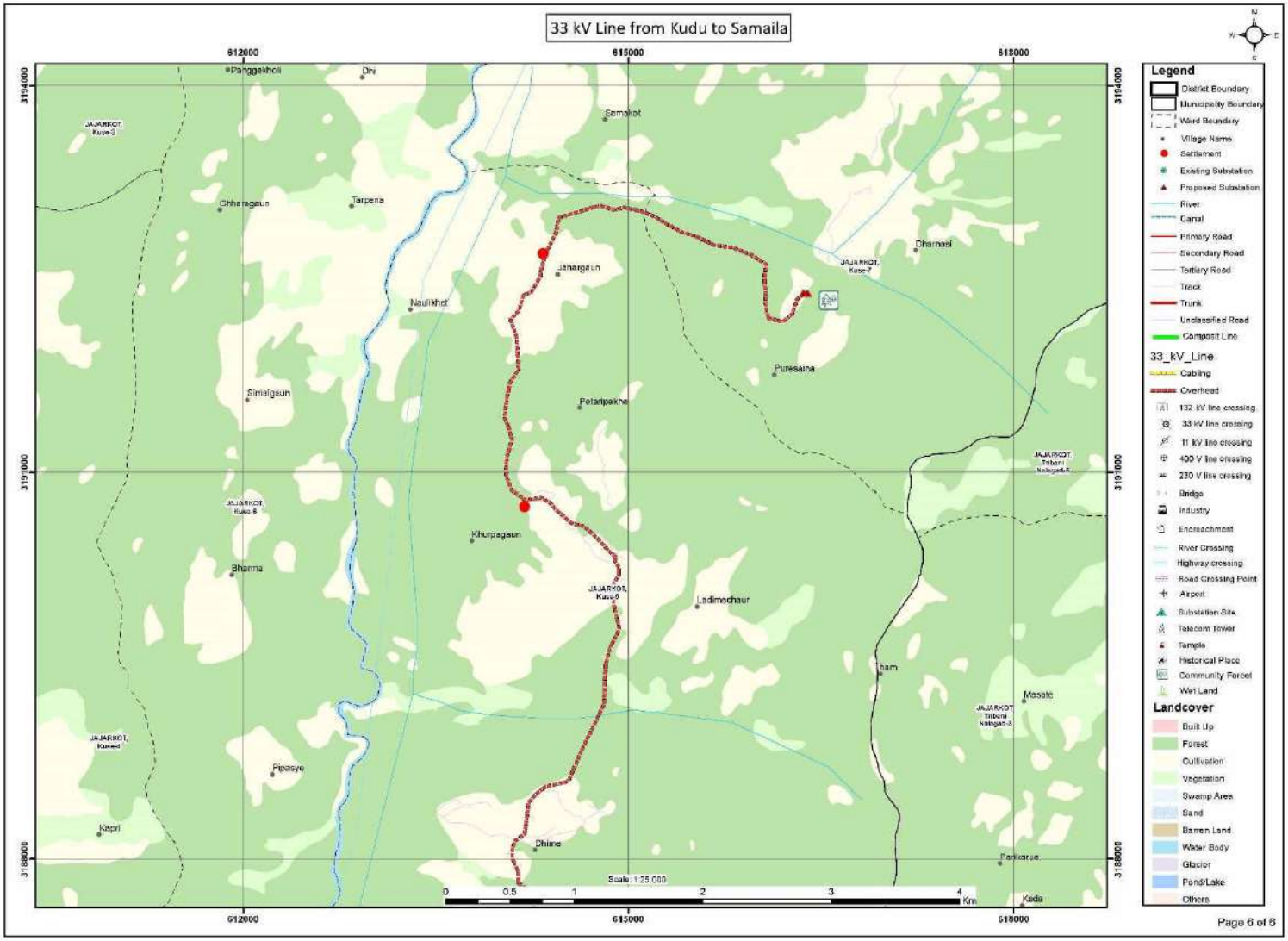
उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्वेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ए.आई.आई.बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको .....
आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम तहाँ ***वडा/गाउँपालिका/नगरपालिका/उप-महानगरपालिकामा*** ३३/११ के.भी. सब-स्टेशन, ३३ के.भी. लाईन, ११ के.भी. लाईन, ४०० भी. लाईन, आदि निर्माण कार्यहरु हुने भएकोले सो कार्यहरु गर्दा स्थानीय सरोकारवालाहरुको कुनै गुनासो भए सो गुनासोको समाधान गर्न गुनासो समाधान संयन्त्र निर्माण गरिएको छ। अतः संलग्न गुनासो समाधान संयन्त्र दस्तावेज बमोजिम आफ्ना गुनासोहरु दर्ता गर्न र सोही दस्तावेजमा भनिए बमोजिम गुनासोको समाधान हुने व्यहोरा सम्पूर्ण सरोकारवालाहरुलाई जानकारी गराइन्छ।

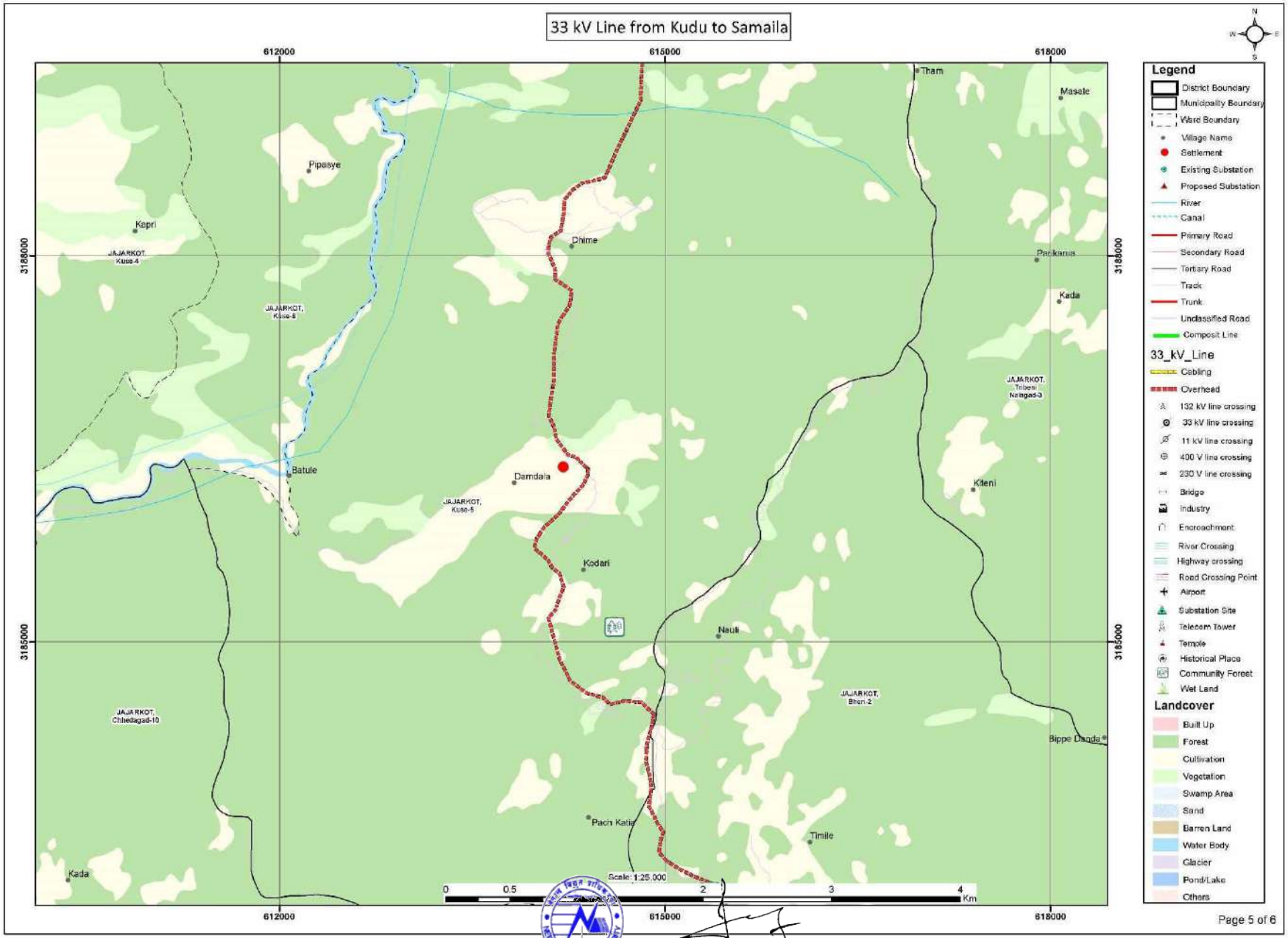
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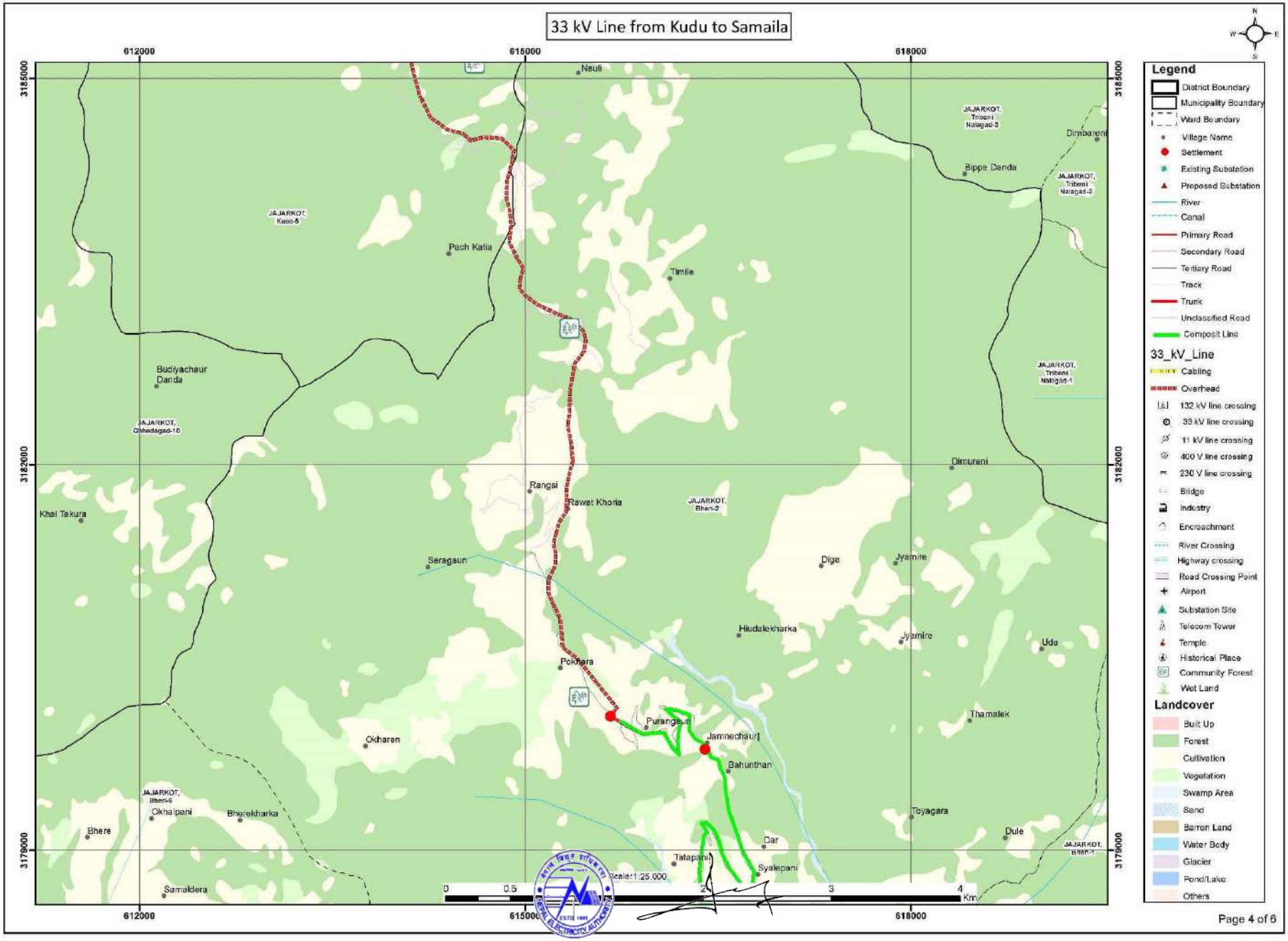
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आयोजना प्रमुख

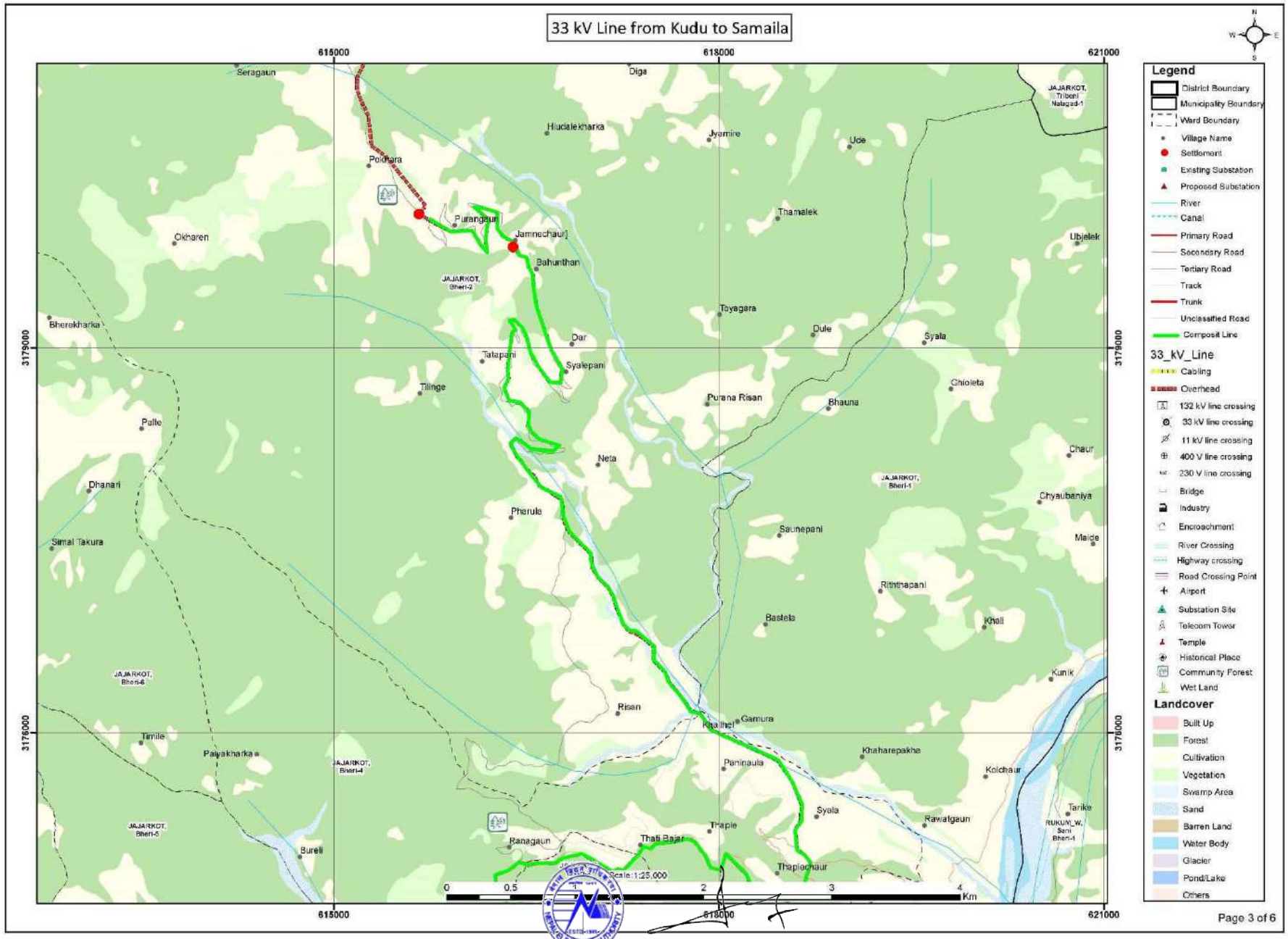
Annex 2: LAYOUT MAPS OF SUBSTATION AND DISTRIBUTION LINE ALIGNMENT

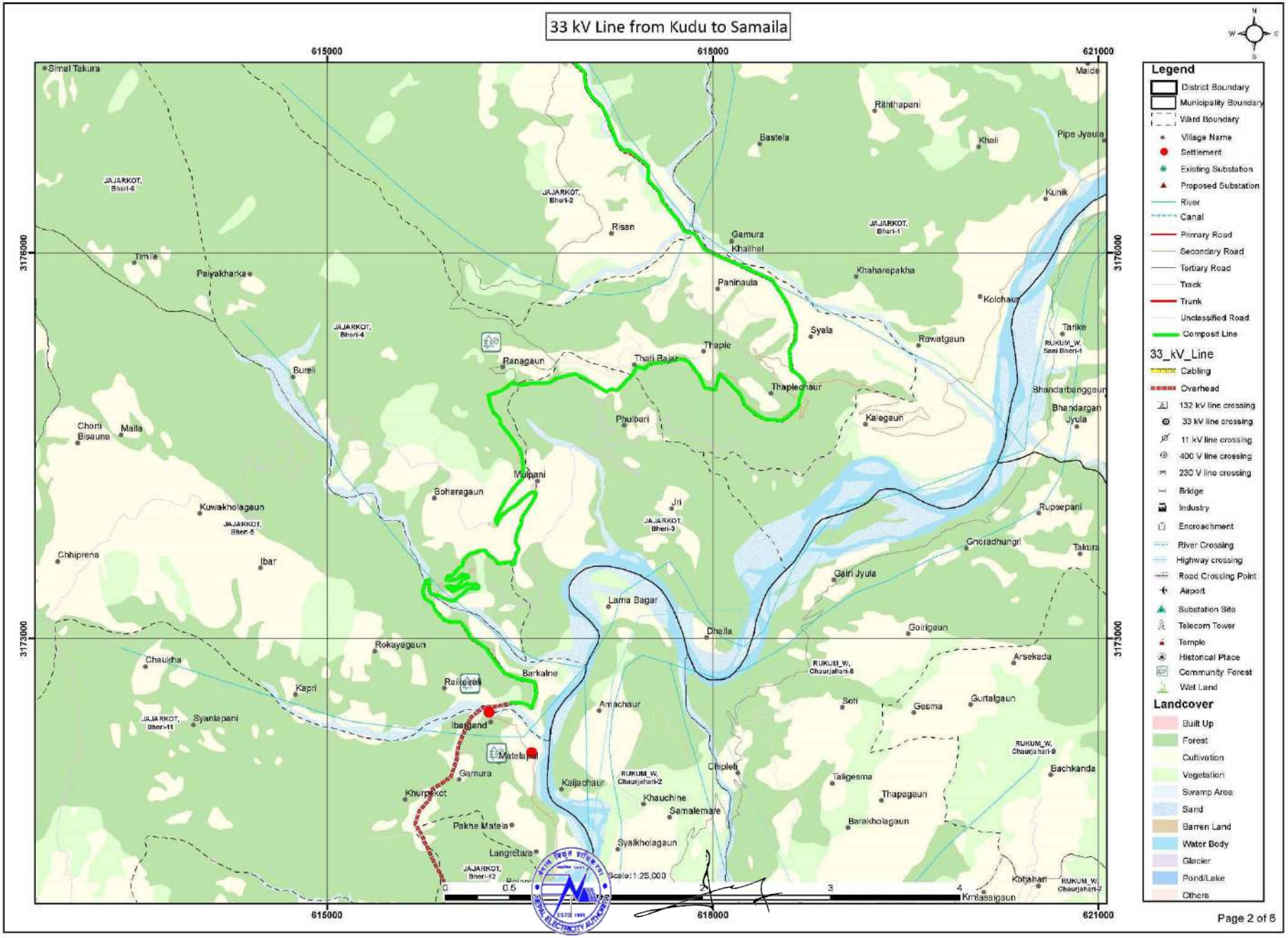


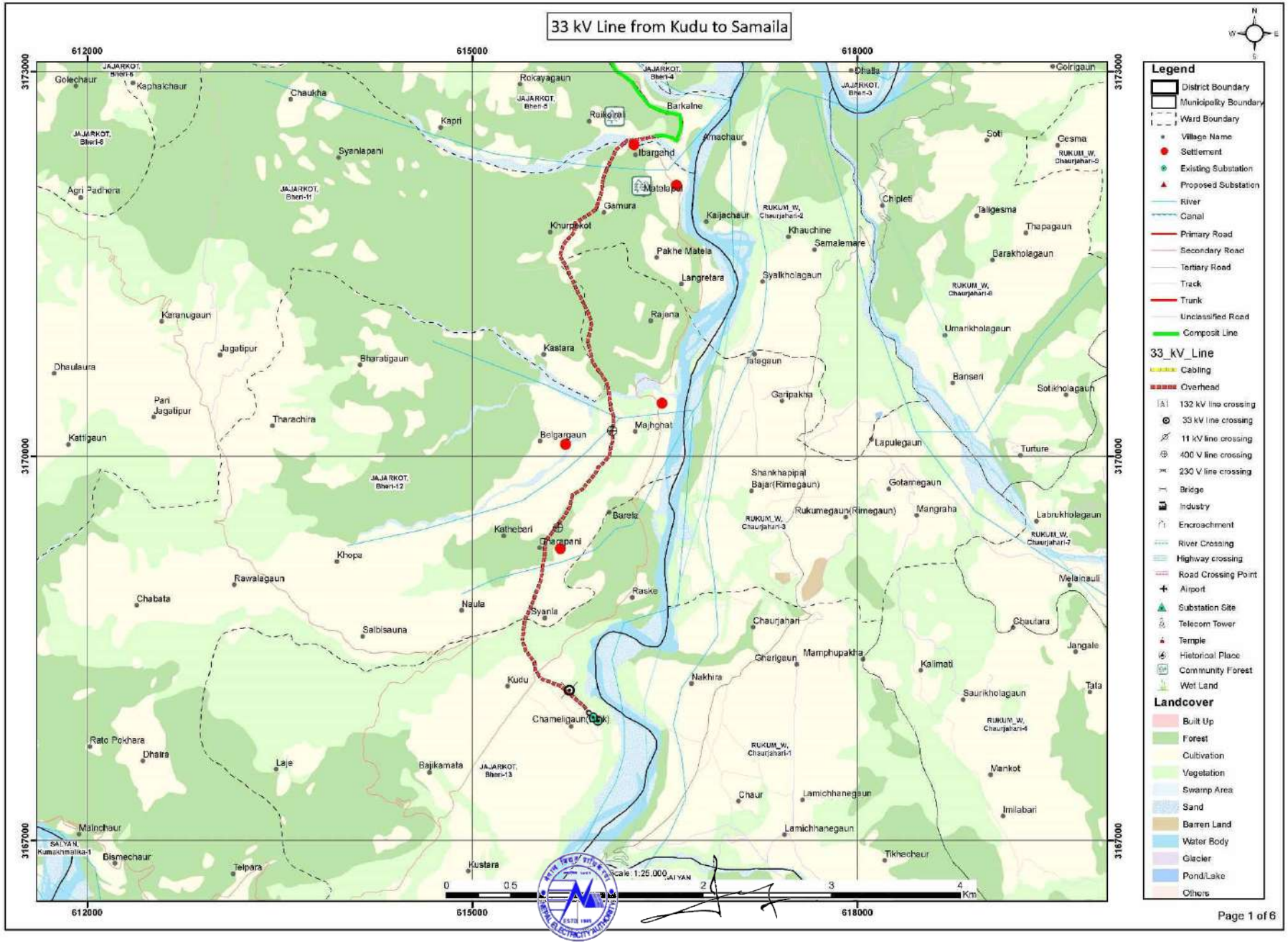

33 kV Line from Kudu to Samaila
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Dharnasi
Puresaina
Simalgaun
Petaripakha
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Scale: 1:25,000
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Legend
District Boundary
Municipality Boundary
Ward Boundary
Village Name
Settlement
Existing Substation
Proposed Substation
River
Canal
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
33_kV_Line
Cabling
Overhead
132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Page 6 of 6


33 kV Line from Kudu to Samaila
612000
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JAJARKOT, Kuse-4
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Batule
Damdala
Kiteni
JAJARKOT, Kuse-5
Kodari
Nauli
JAJARKOT, Bheri-2
JAJA RKOT, Chhedagad-10
Bippe Danda
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Timile
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District Boundary
Municipality Boundary
Ward Boundary
Village Name
Settlement
Existing Substation
Proposed Substation
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Primary Road
Secondary Road
Tertiary Road
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400 V line crossing
230 V line crossing
Bridge
Industry
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River Crossing
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Road Crossing Point
Airport
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Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Page 5 of 6


33 kV Line from Kudu to Samaila
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Timile
Budiyachaur Danda
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Khal Takura
Seragaun
Pokhara
Purangaun
Jamnechaur
Bahunthan
Okharen
Bherekharka
Okhalpani
Bhere
Samaldera
Tatapani
Syalepani
Dar
Hiudalekharka
Diga
Jyamire
Udo
Thamalek
Toyagara
Dule
Dimureni
Bippe Danda
Dimbaneni
JAJARKOT, Kuse-5
JAJARKOT, Chhedagad-10
JAJARKOT, Bheri-2
JAJARKOT, Bheri-6
JAJARKOT, Tribeni Nalagad-3
JAJARKOT, Tribeni Nalagad-2
JAJARKOT, Tribeni Nalagad-1
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Scale:1:25,000
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District Boundary
Municipality Boundary
Ward Boundary
Village Name
Settlement
Existing Substation
Proposed Substation
River
Canal
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
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Overhead
132 kV line crossing
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Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others


33 kV Line from Kudu to Samaila
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618000
621000
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3176000
Seragaun
Diga
Hiudalekharka
Jyamire
Ude
Pokhara
Purangaun
Jamnechaur
Thamalek
Ubjelek
Okharen
Bahunthan
JAJARKOT, Bheri-2
Toyagara
Dule
Syala
Bherekharka
Dar
Tatapani
Syalepani
Tilinge
Purana Risan
Bhauna
Chioleta
Palle
Neta
Chaur
Dhanari
JAJARKOT, Bheri-1
Chyaubaniya
Pharula
Saunepani
Maide
Simal Takura
Ritthapani
Bastela
Khali
Kunik
JAJARKOT, Bheri-6
Risan
Gamura
Khalihel
Timile
Paiyakharka
Khaharepakha
JAJARKOT, Bheri-4
Paninaula
Kolchaur
Tarike
Syala
Rawalgaun
Thaple
JAJARKOT, Bheri-5
Ranagaun
Thati Bajar
RUKUM_W, Sani Bheri-1
Burali
Thaplechaur
Scale:1:25,000
0 0.5 1 2 3 4 Km
Legend
District Boundary
Municipality Boundary
Ward Boundary
Village Name
Settlement
Existing Substation
Proposed Substation
River
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Secondary Road
Tertiary Road
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132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
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Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Page 3 of 6


33 kV Line from Kudu to Samaila
615000
618000
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Simal Takura
Melde
Riththapani
Bastela
Khali
Pipe Jyaula
Kunik
Risan
Gamura
Khaihel
Timile
Paiyakharka
Khaharepakha
Paninaula
Kolchaur
Tarike
Syala
Rawatgaun
Thaple
Ranagaun
Thati Bajar
Thaplechaur
Bhandarbanggaun
Bhandargan
Jyula
Kalegaun
Phulbari
Bureli
Chorti Bisauna
Malla
Mulpani
Boharagaun
Kuwakholagaun
Jri
Rupsepani
Chhiprena
Ibar
Choradhungri
Takura
Gairi Jyula
Lama Bagar
Dhalla
Goirigaun
Rokaygaun
Chaukha
Barkalne
Arsekada
Kapri
Raikoteli
Amachaur
Soti
Gesma
Gurtalgaun
Syanlapani
Ibangand
Matelajhul
Bachkanda
Gamura
Chipleti
Kaljachaur
Taligesma
Khurpekot
Khauchine
Thapagaun
Samalemare
Pakhe Matela
Barakholagaun
Syalkholagaun
Langretara
Kotjahari
Kimbasaigaun
JAJARKOT, Bheri-6
JAJARKOT, Bheri-2
JAJARKOT, Bheri-1
JAJARKOT, Bheri-4
JAJARKOT, Bheri-5
JAJARKOT, Bheri-3
JAJARKOT, Bheri-11
JAJARKOT, Bheri-12
RUKUM_W, Sani Bheri-1
RUKUM_W, Chaurjahari-8
RUKUM_W, Chaurjahari-9
RUKUM_W, Chaurjahari-2
RUKUM_W, Chaurjahari-7
Legend
District Boundary
Municipality Boundary
Ward Boundary
Village Name
Settlement
Existing Substation
Proposed Substation
River
Canal
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
33_kV_Line
Cabling
Overhead
132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Scale:1:25,000
0
0.5
2
3
4
Page 2 of 6


33 kV Line from Kudu to Samaila
612000
615000
618000
3173000
3170000
3167000
Legend
District Boundary
Municipality Boundary
Ward Boundary
Village Name
Settlement
Existing Substation
Proposed Substation
River
Canal
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
Composit Line
33_kV_Line
Cabling
Overhead
132 kV line crossing
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Substation Site
Telecom Tower
Temple
Historical Place
Community Forest
Wet Land
Landcover
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Others
Golechaur
Kaphalchaur
Chaukha
Rokayagaun
Barkalne
Kapri
Syanlapani
Ibargahd
Amachaur
Matelapani
Agri Padhera
Gamura
Khurpekot
Kaijachaur
Chauchine
Semalemare
Pakhe Matela
Langretara
Syalkholagaun
Rajana
Karanugaun
Jagatipur
Kastara
Bharatigaun
Dhaulaura
Pari Jagatipur
Tharachira
Kattigaun
Belgargaun
Majhghat
Talegaun
Garipakha
Lapulegaun
Turture
Shankhapipal
Bajar(Rimegaun)
Gotamegaun
Rukumegaun(Rimegaun)
Mangraha
Labrukholagaun
Katheberi
Bareta
Charapani
Khopa
Rawalagaun
Chabata
Naula
Raske
Syanla
Salbisauna
Chaurjahari
Gharigaun
Mamphupakha
Kalimati
Nakhira
Kudu
Chameligaun(Tok)
Rato Pokhara
Dhaira
Laje
Bajikamata
Chaur
Lamichhanegaun
Imilabari
Mankot
Saurikholagaun
Tata
Jangale
Chautara
Melainauli
Malnchaur
Bismechaur
Telpara
Kustara
Tikhechaur
Soti
Gesma
Chipleti
Taligesma
Thapagaun
Barakholagaun
Umarikholagaun
Banseri
Sotikholagaun
Scale 1:25,000
0 0.5 2 3 4 Km
Page 1 of 6

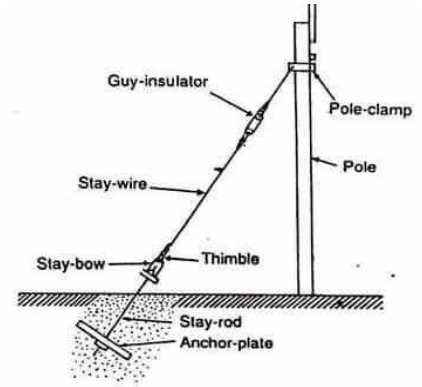
Annex 3: FACILITY AND COMPONENTS



Transformer



Switch Yard



Stay/Guy Sets



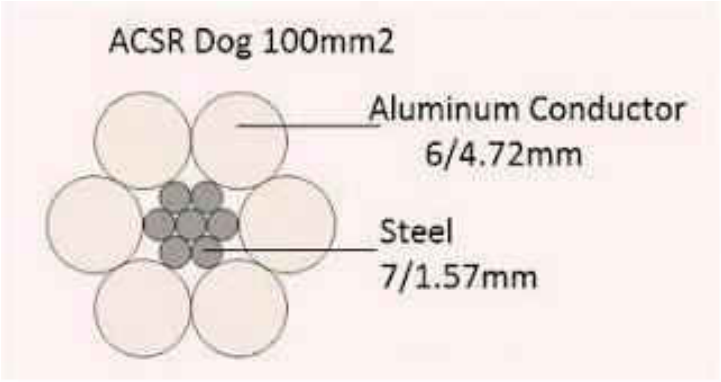
Steel Tubular Pole



Insulator

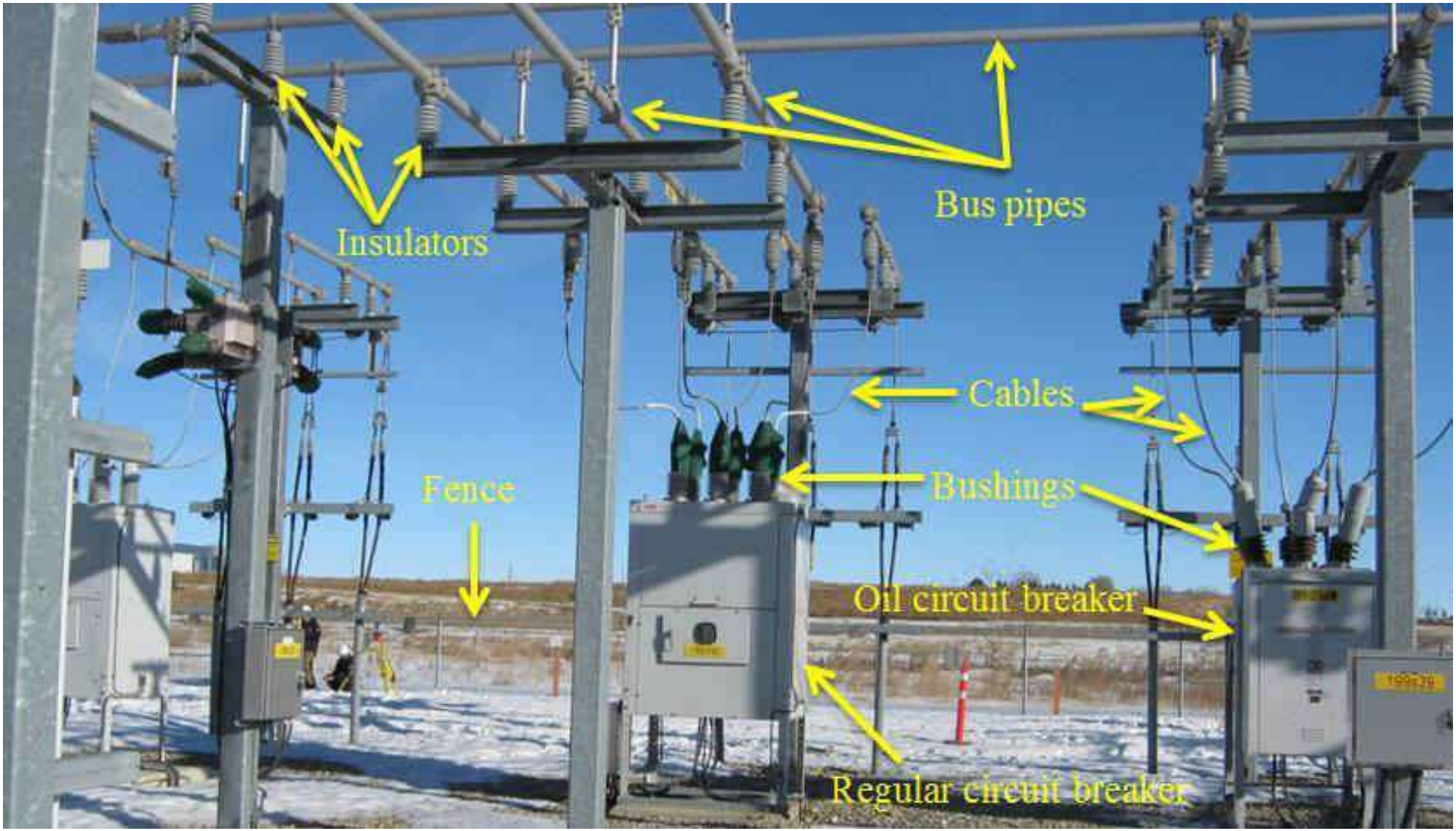


Civil-Structures Supporting Electrical Components





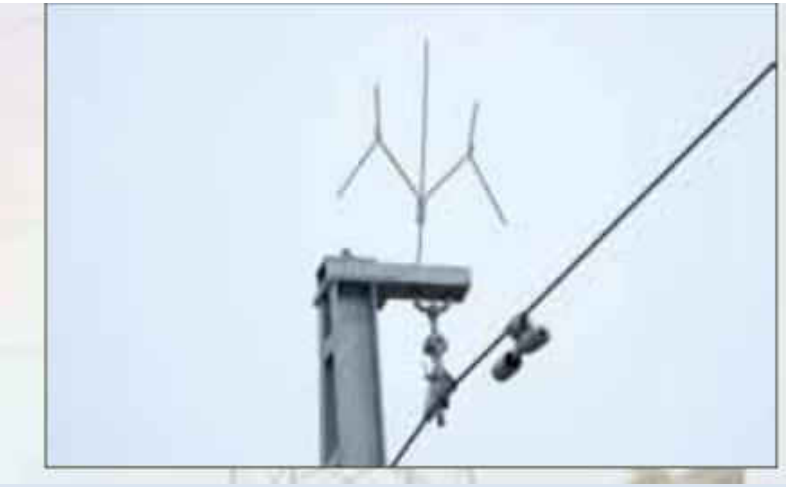
Conductor



Possible components within 33 kV/11 kV Substation



Bird Diverting Reflector



Wishbone Prevents Bird Landing on Wire



White Spiral in Wire Improves Visibility of Wire



Construction of Nest at Poles also divert Brid not sitting at Wires

Annex 4: LEGISLATIVE PROVISIONS

SN	Legal Provisions	Description	Relevancy concerning Project
1.	**Constitution of Nepal**	● The Constitution of Nepal is the main legal document, which emphasizes the right to a clean environment of the people, natural resources protection, preservation, and its prudent use. Rights regarding the clean environment, under article 30: ● It includes making multi-purpose development of water resources, while according priority to domestic investment based on public participation to ensure a reliable supply of energy affordably, and easily, and make proper use of energy for the fulfillment of the basic needs of citizens, by generating, and developing renewable energy in article 51 (g).	DSUEP helps to fulfill the rights of people to live in a clean environment along with fulfilling the basic needs by providing access to sufficient energy.
2.	**Environment Protection Act 2076 (2019 AD)**	● Section 3 of the Act requires the proponent to conduct environmental studies concerning the prescribed proposals of any developmental works. Subsection 2 of this act provides the framework for the environmental study report prepared according to sub-section (1) shall, in fulfillment of the process as prescribed, be submitted to the relevant bodies of the Government of Nepal for approval.	Environmental Studies, and approval of the report from the authorized body before construction of any project is mandatory to minimize the negative impacts in Nepal which is addressed in EPA, 2076.
3.	**Environmental Protection Rule, 2077 (2020 AD) [First Amendment on 2078 (2021)]**	● Under the Environmental Protection Rules (2020) first amendment (2021), rule (3) as mentioned in annex (1), Section (F) (Energy, Water Resources, and Irrigation Sector) sub-section (1), a proponent shall be required to carry out the Brief Environmental Studies for construction of transmission line project less than 66 kV in forest land for another purpose.	This rule provides the overall guidance to what type of environmental studies is required according to the project by the Government of Nepal.
		● Pertaining to Rule 3(1), Environment Protection Act (EPA), 2019 describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1)	The proposed Subproject will use the of Jungle Danda Community

		under Environment Protection Regulation 2020 (First Amendment in 2021/05/24 BS on Nepal Gazette) state "use of forest area for the electricity distribution line project up to 66 KV"	Forest (CF), Kaina Timure Danda CF, Budhe Dhungaa CF, Jagatipur CF, Deuli Danda CF, Bhagbati CF, Bohara CF, Syala Pakha Kale Gaun CF, Dara Bhadale Pakha CF, Patal Deurali CF, Bastola CF, Mayur Pankhi CF, Masara CF, Banjh Bisauna CF, Khurpa CF and Chhum Patal CF land for the purpose of 33 kV distribution line extension and substation construction. For which, BES is mandatory.
4.	**Nepal Environmental Policy, and Action Plan, 2050(1993)**	The aims of NEPAP are: ● To manage natural, and physical resources efficiently, and sustainably ● To balance the development efforts, and environmental conservation for sustainable fulfillment of basic needs ● To preserve endemic, and endangered species, and their habitats; the promotion of private, and public institutions for biological resources inventory, and conservation ● To safeguard national heritage ● To mitigate the adverse environmental impact of development projects, and human actions ● To integrate environment, and development through appropriate institutions, adequate legislation, and economic incentives, and sufficient public resources	DSUEP should follow the aims of NEPAP to protect, and conserve the physical, biological, and social environment during the construction of a 33 kV distribution line along with a substation.
5.	**Forest Act 2076 (2019)**	• Pertaining to the chapter 12, Section 42(1), if there is no other alternative to the using of forest area for the operation of a national priority project, plan of which investment is approved by the Investment Board, project of national pride and it appears from the environment examination referred to in the	• About 14.82 ha of forest area occurs within RoW of the proposed 33 kV distribution line

		prevailing law that the operation of such plan does not result in significant adverse effects on the environment, the Government of Nepal may give approval, as prescribed, to use any part of the national forest for the purpose of operating such plan, • Similarly, In providing the forest area for the operation of a plan pursuant to sub-section (1), to the extent possible, a land that is adjoining to the national forest area near the project site and situated in the same geographical and ecological belt and has such landscape where forest can be developed shall be provided for the purpose of planting trees at least in the area equal to the forest area that has to be used.	• Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 6,757
6.	**Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019)**	• Pertaining to Section 4 (1), environmental study report should be prepared if the project needs the use of national forest area, • Section 7 require the approval of Government of Nepal, for the use of forest on the implementation of project • Section 17 (3) require plantation of trees in the ratio of 1:10 in the area given by the concerned forest office as a compensation for the removal trees during the project implementation Section 17 (4) require care, maintenance and upkeep of the planted trees and handover to concerned forest office after 5 years.	• About 14.82 ha of forest area occurs within RoW of the proposed 33 kV distribution line • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 6,757
7.	**Electricity Act 1992**	● No person shall be entitled to conduct survey, generation, transmission, or distribution of electricity without obtaining a license under this act. ● The Electricity Act of 1992 has the provision of land procurement for the development of Subprojects that involve electricity generation, transmission, or distribution. The Act states that the licensee may apply to GoN to purchase the land or house of any person if it is required for the generation, transmission, or distribution of electricity. Upon the receipt of such an application, GoN may make the land or house, so requisitioned, available to any corporate body under the prevailing laws.	The main goal of this project is to distribute a sufficient amount of electricity by constructing a 33kV line, and substation by surveying to minimize the impacts.
8.	**Rural Energy Policy, 2006**	The rationale of formulating, and implementing this policy is to create a conducive environment that will self-motivate, and mobilize local institutions,	This project helps to improve the distribution, and

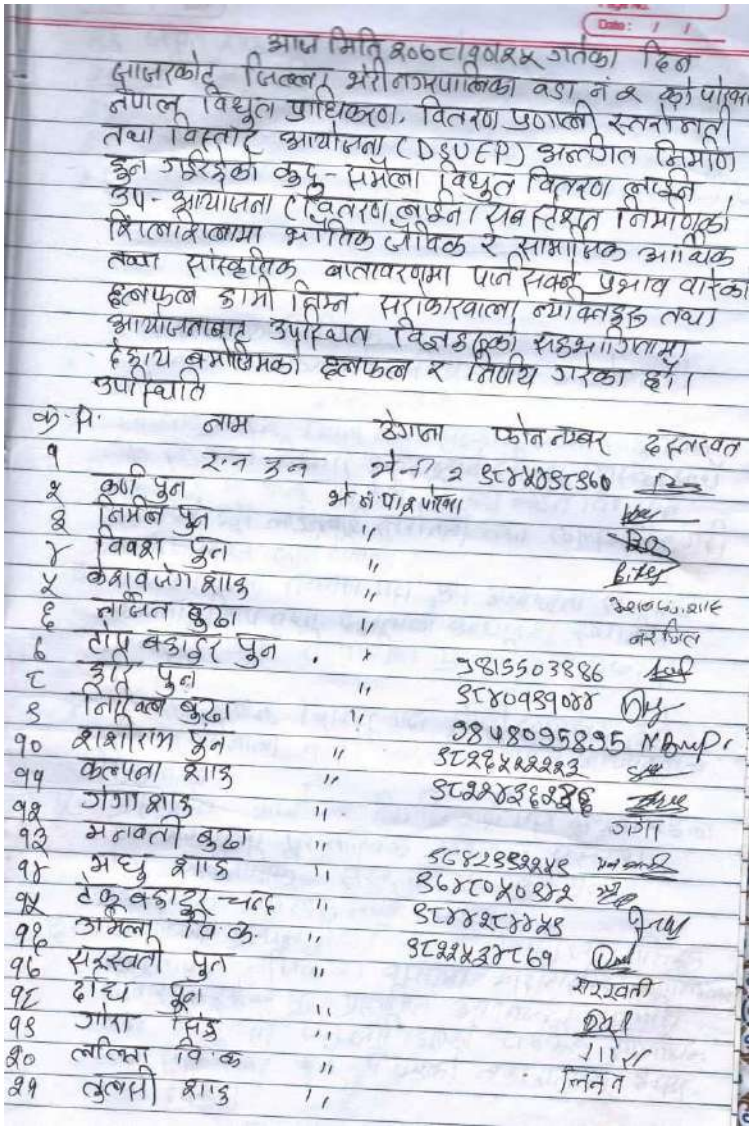
		rural energy user groups, non-government organizations, cooperatives, and private sector organizations for the development, and expansion of rural energy resources. The government will facilitate, and promote to involve private development, and expansion of new technologies. It has also envisioned subsidy provision for the promotion of such renewable energy technologies.	motivate use the of electricity in rural areas of western Nepal.
9.	**Labor Act, 2074 (2017 AD)**	This labor Act was made under the management of parliament under sub-clause 1 of clause 296 of the Constitution of Nepal. Sub-section 3 of Section 2 states that the employees should not be compelled to other work other than they are assigned for. In addition, Sub-section 5 of Section 2 states about the prohibition of child labor in any organization, and sub-section 6 of Section 2 states that there should not be any kind of discrimination among the employee's regard of religion, ethnicity, gender, origin, language, or intelligence or other kinds of characters.	The construction of a project is only possible when the rights of labor are secure. In this project, the Contractor should follow this act strictly.
10.	**Child Labor (Prohibition, and Regulation) Act, 2056 (2000 AD)**	As per section 3 of this act, no child has not attained the age of 14 years shall be engaged in works as a laborer.	Child labor is strictly prohibited in this project, and Contractors should follow this act.
11.	**Solid Waste Management Act, 2068 (2011 AD)**	This act has been formulated to minimize solid waste products from the target area by setting rules, and regulations on solid waste management (SWM) in the country to develop a better environment for the systematic, and effective management of solid waste, and to involve all the concerned stakeholders in SWM practice. The main features of this act are the discussion of the 3R principle (Reduce, Reuse, and Recycle). 3R principle seems to be very beneficial as it not only increases the life of landfill site but also saves the money which could be used for other infrastructure development. Section 4 of the act assigns the local body to manage or use the solid waste discharged or dumped in the collection center, transfer station, or treatment plant or collected during cleaning.	These acts provide the overall framework to manage the solid waste generated from households to the project level. Also, the proponent should manage the waste generated during construction.
12.	**Solid Waste Management**	The solid waste management rule was formulated as per the provision made in article 50 of the Solid	These rules provide the overall

	Rules, 2070 (2013 AD)	Waste Management Act, 2068. This regulation has emphasized the segregation of waste at source, and mentioned that the responsibility of proper disposal, and management of source belongs to the producers themselves. Section 3 of the rule describes the segregation, and management of solid waste. It has been mentioned that it is essential to segregate degradable, and non-degradable solid waste at the source.	framework for how to reduce the volume of waste disposed of at the source during the construction of the substation.
13.	**Fifteenth Plan**	The vision of the 15th plan is to contribute to the prosperity of the nation through sustainable, and reliable development of hydropower by setting the goal which is to ensure energy security through intensifying hydropower generation. In addition, one of the strategies of the government of Nepal in the 15th plan is to make the distribution system effective, and reliable to increase energy efficiency, and increase power consumption by expanding access to electricity by formulating the required policies:	This 5-year interim plan sets the goal about the generation, and distribution of hydroelectricity in Nepal which is directly related to this project.
14.	**United Nations Framework Convention on Climate Change (UNFCCC), 1992**	UNFCCC, Signatories: 165. Parties: 195. (1), Article (4), commitment (f) states climate change considerations into account, to the extent feasible, in their relevant social, economic, and environmental policies, and actions, and employ appropriate methods, for example, impact assessments, formulated, and determined nationally, to minimize adverse effects on the economy, on public health, and the quality of the environment, of Subprojects or measures undertaken by them to mitigate or adapt to climate change. After it entered into force on 21 March 1994, it mandates the individual state for prioritization of resource conservation with development.	The goal of this project is to replace the traditional form of energy with clean energy i.e. electricity which ultimately reduces air pollution, and smoke.
15.	**ILO 169**	The main objective of this convention is to secure the rights of indigenous, and tribal people along with the gender equality, and non-discrimination of workers during work. Article 1 on the First Part of this convention mainly focused on the following points: (a) the social, cultural, and economic conditions of tribal peoples in independent countries differentiate from other parts of the national	Nepal is the part of ILO convention that's why ILO 169 should strictly follow during construction, and implementation of any types

		community, and their status is managed fully or partially by their customs or traditions or by special laws or regulations; (b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries, and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions. ● Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply. ● The use of the term people in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law.	
16.	**Environment and Social Management Framework**	● ESMF is to guide DSUEP sub-projects in the area of E&S management using appropriate instruments, methodologies, procedure and responsibilities during the project cycle. NEA and the project partners shall apply during design and development of the sub-projects in order to comply with the Government of Nepal E&S regulations and the Financiers' standards on E&S assessment and management, Involuntary Resettlement, Indigenous People, Gender, etc.).	Main guiding document for E&S study to identify issues and recommending appropriate practical augmentation/ mitigation measures
17.	**Environmental and Social Policy (ESP)**	● This policy speaks for the mandatory E&S requirements for each Project like, screening, DDR, E&S Assessment, ESMP, ESMF, Information Disclosure, Consultation and Monitoring and Evaluation.	Mandatory requirement for ESMP study
18.	**Environmental and Social Standards of AIIB** [12]	● Three associated mandatory environmental and social standards (ESSs) set out more detailed environmental and social requirements relating to the ESMP	ESMP requirement

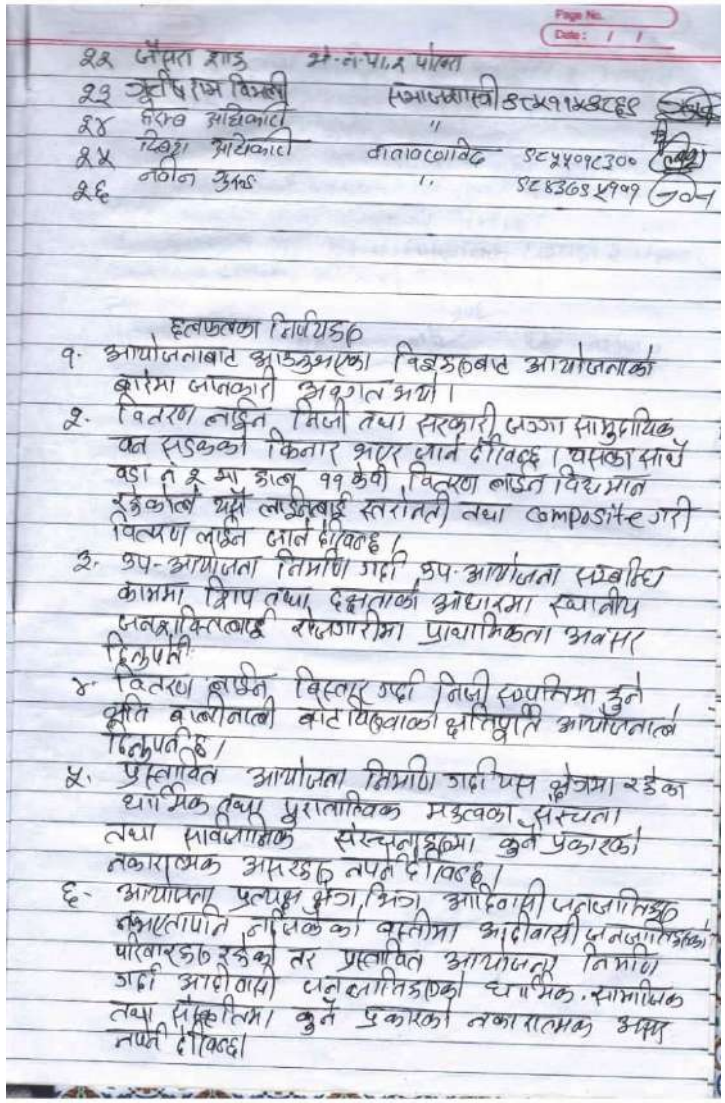
[12] *https://www.aiib.org/en/policiesstrategies/download/environmentframework/20160226043633542.pdf*

Annex 5: CONSULATATION MEETING MINUTES



आज मिति २०८८।७।२५ गतेका दिन
झाडाकोट, सिक्कार, श्रीनगरपालिका वडा नं ९ को पार्वत
नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण
तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण
हुने ३३केभी कुडु-समैला विद्युत वितरण लाईन
उप-आयोजना (वितरण लाईन) सम्बन्धि परामर्शको
सिलसिलामा भौतिक जीवन र सामाजिक आर्थिक
तथा सांस्कृतिक वातावरणमा पर्न सक्ने प्रभाव बारेका
हल्फल्ल गर्नु तिन सरोकारवाला व्यक्तिहरु तथा
आयोजनाबाट प्रभावित विज्ञहरुको सहभागितामा
देहाय बमोजिमको हल्फल्ल र निर्णय गरेका हौं।
उपस्थिति

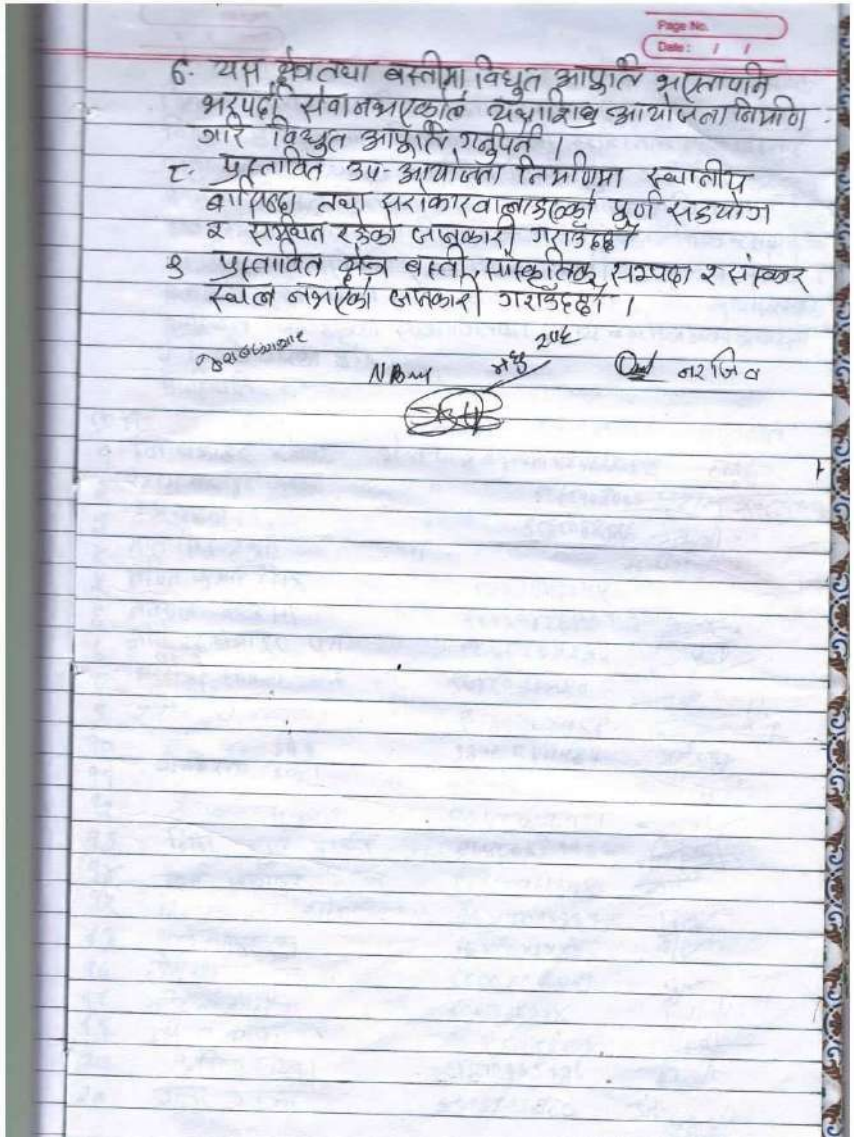
क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	रन बहादुर	भ.नं.पा.१ पार्वत	९८४२०९८९६०	
२	कली पुन	"		
३	निमेला पुन	"		
४	विवश पुन	"		
५	केशवजंगे श्राउ	"		
६	नर्जित बुढा	"		
७	तोप बहादुर पुन	"	३९८५५०३८८६	
८	हरि पुन	"	९८४०४९०८८	
९	निर्मल बुढा	"	३९४८०९५८९५	
१०	शशीराम पुन	"	९८२९५२२२२३	
११	कल्पना श्राउ	"	९८२९२३६२३६	
१२	गंगा श्राउ	"		
१३	मनवती बुढा	"	९८४२९९३४४९	
१४	मधु श्राउ	"	९८४८५०९३२	
१५	देवु बहादुर चन्द	"	९८४३८४४५९	
१६	अम्बला विक	"	९८३५३३८६९	
१७	सरस्वती पुन	"		
१८	दोच पुन	"		
१९	गोरा सिंह	"		
२०	लक्ष्मी विक	"		
२१	तुलसी श्राउ	"		



२२	जेमता श्राउ	भ.नं.पा.१ पार्वत	
२३	[illegible]	सिमलताली	९८४१५४८६६९
२४	दिपक अधिकारी	"	
२५	विष्णु अधिकारी	बाताबरणविद	९८५४०९८३००
२६	नवीन कुमार	"	९८४३७९५९९१

हल्फल्लका विषयहरु

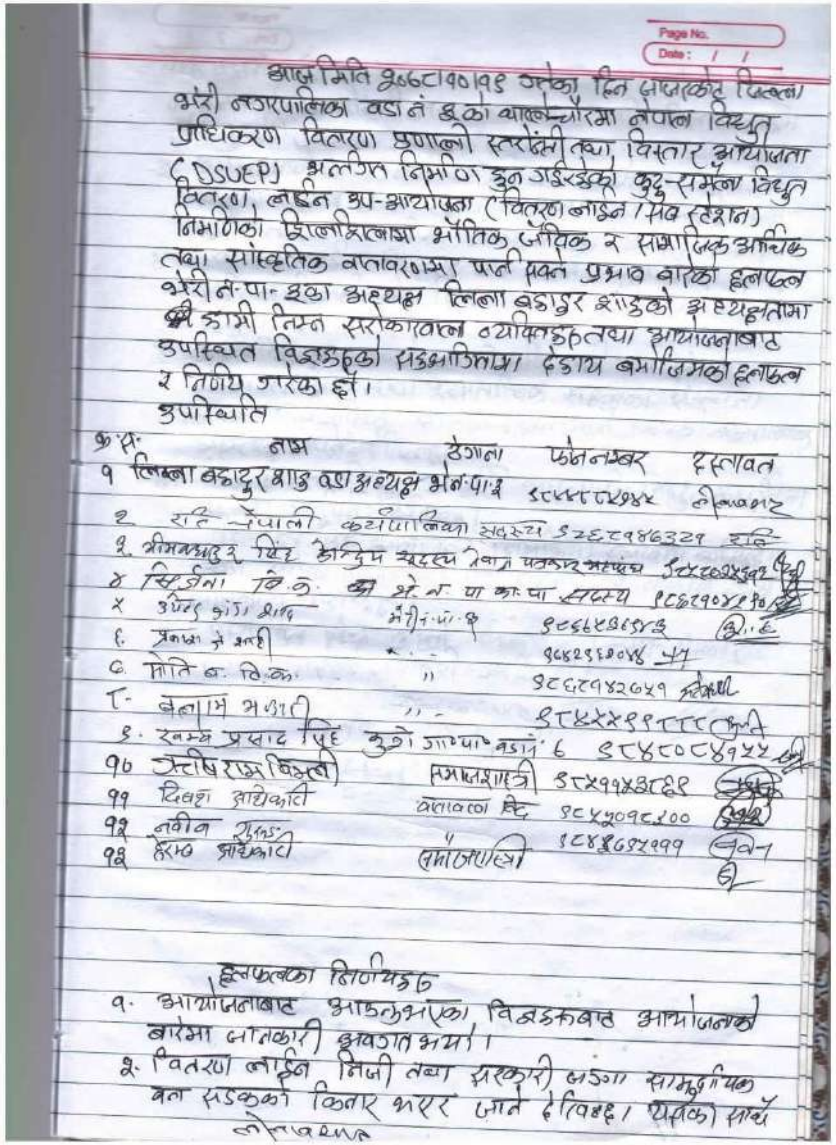
१. आयोजनाबाट झाडाकोटका विज्ञहरुबाट आयोजनाको बारेमा जानकारी आदान प्रदान भयो।
२. वितरण लाईन मिलाउ तथा सरकारी जग्गा सामुदायिक वन सडकको किनार भएर जान दिनुपर्छ। यसका लागि वडा नं ९ मा हाल ११ केभी वितरण लाईन विद्यमान रहेकोले यही लाईनलाई सरलतापूर्वक तथा composite गरी वितरण लाईन जान दिनुपर्छ।
३. उप-आयोजना तिर्माण गर्दा उप-आयोजना सम्बन्धि कामका किसिम तथा दक्षताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवश्य दिनुपर्नेमा
४. वितरण लाईन विस्तार गर्दा निजी सम्पत्तिमा हुने क्षति बापतको उचित क्षतिपूर्ति आयोजनाले दिनुपर्नेमा
५. प्रस्तावित आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनालाई कुनै प्रकारको नकारात्मक असरहुन नपर्ने देखिन्छ।
६. आयोजना प्रत्यक्ष क्षेत्र भित्र आदिवासी जनजातिहरु नभएतापनि नजिकका बस्तीमा आदिवासी जनजातिका परिवारहरु रहेको र प्रस्तावित आयोजना निर्माण गर्दा आदिवासी जनजातिहरुको धार्मिक, सामाजिक तथा संस्कृतिमा कुनै प्रकारको नकारात्मक असर नपर्ने देखिन्छ।



६. यस क्षेत्रका बस्तीमा विद्युत आपूर्ति अत्यावश्यक अरुपर्दा संचालनमा रहेका विद्युत आयोजना निम्नानुसार गरे विद्युत आपूर्ति गर्नुपर्ने ।

८. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरकारवालाहरुको पुर्ण सहयोग र समन्वयत रहेको जानकारी गराउनुहुने ।

९ प्रस्तावित क्षेत्र बस्ती, सांस्कृतिक सम्पदा र संरक्षण स्थल नभएको जानकारी गराउनुहुने ।



आज मिति २०८८।१०।१६ गतेका दिन आयोजनाद्वारा भरी नगरपालिका वडा नं ४ का वासिन्दाहरुमा लक्षित विद्युत प्राधिकरण वितरण प्रणालीको सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुडु-समैला विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन / पिव स्टेशन) निर्माणको छिलोफाटोमा भौतिक जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सम्भावित प्रभाव बारेमा छलफल भरी न.पा. ४ का अध्यक्ष लिलाबहादुर शाहको अध्यक्षतामा वडा कार्यालय सभाकक्षमा सम्पन्न सरोकारवाला व्यक्तिहरुसंग आयोजनाबाट उपस्थित विज्ञहरुको सहभागितामा देहाय बमोजिमको छलफल र निर्णय गरेका छौं ।

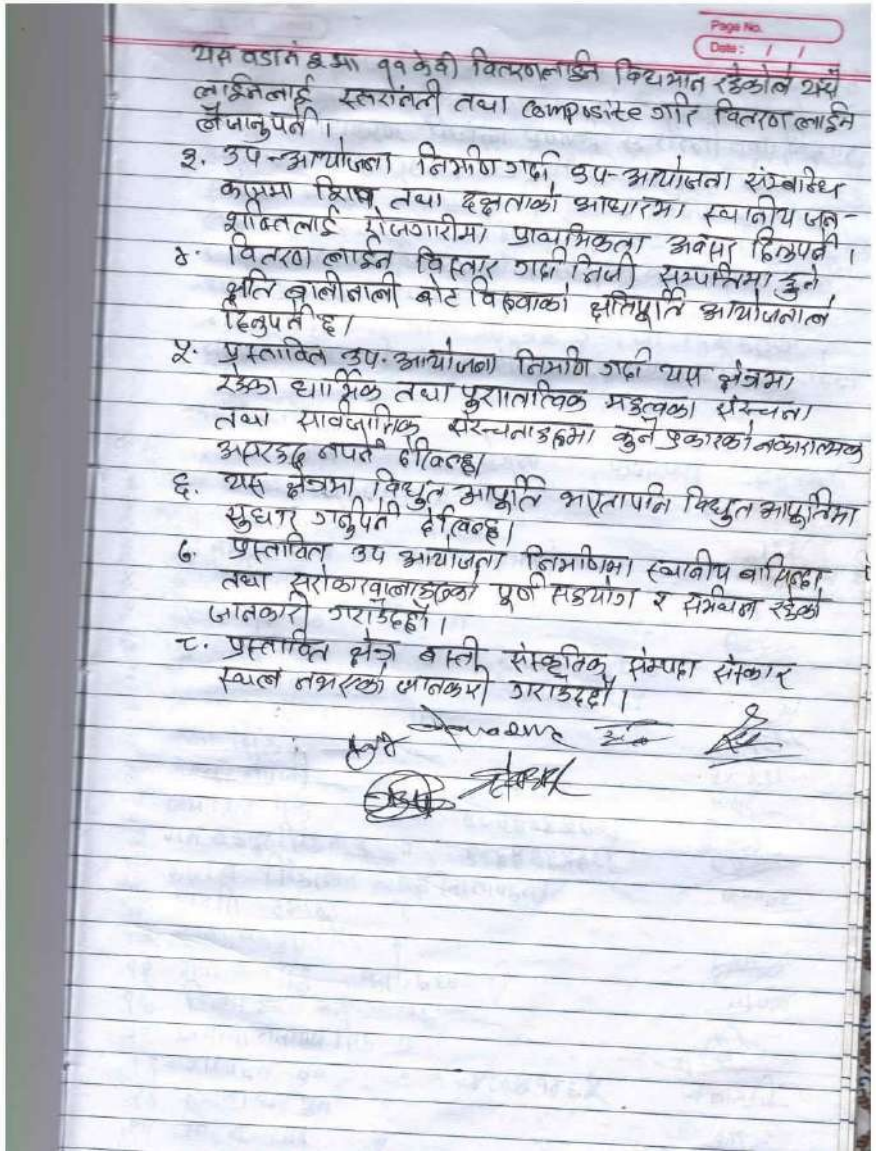
उपस्थिति

क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	लिलाबहादुर शाही	वडा अध्यक्ष भरतपाङ्ग	९८४४८४४१४५	
२	रहि नेपाली	कार्यपालिका सदस्य	९७६८१४४३२१	रहि
३	भीमबहादुर पिंडे	डोल्पुम गाउपालिका		
४	सिर्जना के.सी.	भरतपाङ्ग न.पा.	९८६१९४१४००	
५	उमेश कुमार शाह	मेची-२	९८६६४७६७१३	
६	प्रकाश नेपाली	"	९८४२९६२०४८	
७	गोविन्द विक्रम	"	९८६२९४२७४१	
८	बलराम अधारी	"	९८४४४९१८८८	
९	रत्नमान प्रसाद पिंडे	कुडो गाउपालिका वडा नं. ६	९८४८०८४१४४	
१०	जितेन्द्र राम विश्वकर्मा	समालझाडी	९८४१४४३८६९	
११	दिलहरा आचेकाटी	बस्नेवाला	९८४५०९८२००	
१२	नवीन गुरुङ	"	९८४९८७४१११	
१३	हिरा आचेकाटी	समालझाडी		

छलफलका विषयवस्तु

१. आयोजनाबाट आकलन भएका विज्ञहरुबाट आयोजनको बारेमा जानकारी आदान भयो ।

२. वितरण लाईन निजी तथा सरकारी जग्गा सामुदायिक वन सडकको किनार भएर जाने हुँदा । यसको लागि



यस वडाले ३ मा ११ केवी वितरणलाइन विद्यमान रहेकोले यसै लाइनलाई स्तरोन्नती तथा Composite गरि वितरण लाइन लैजानुपर्ने।

२. उप-आयोजना निर्माण गर्दा, उप-आयोजना संबन्धित क्षेत्रमा शिक्षा तथा दक्षताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवश्य दिनुपर्ने।

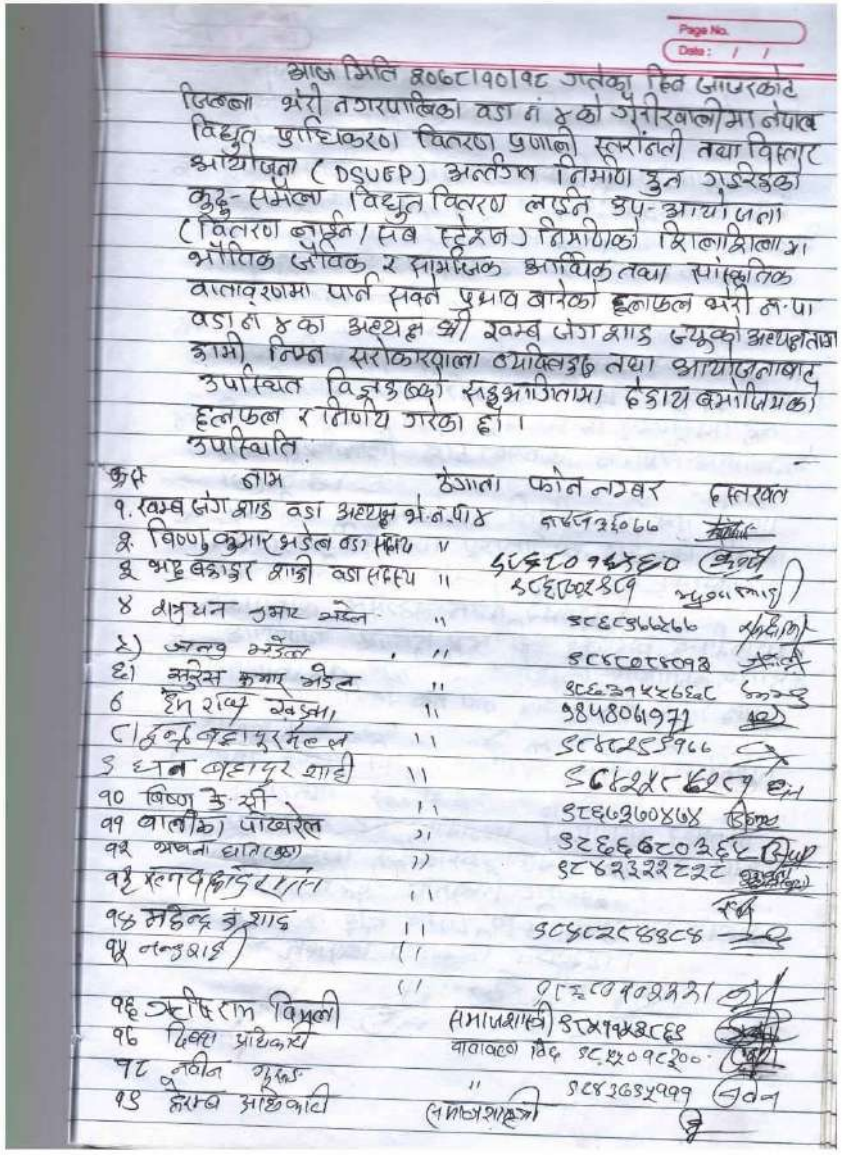
३. वितरण लाइन विस्तार गर्दा निर्माण सम्पन्नमा कुनै क्षति पुगीनाली बोट विरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने हुन्छ।

४. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असरहुन नपर्ने देखिन्छ।

५. यस क्षेत्रमा विद्युत आपूर्ति अहिलेपनि विद्युत आपूर्तिमा सुधार गर्नुपर्ने देखिन्छ।

६. प्रस्तावित उप आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र सम्बन्धमा रहेको जानकारी गराईएको छ।

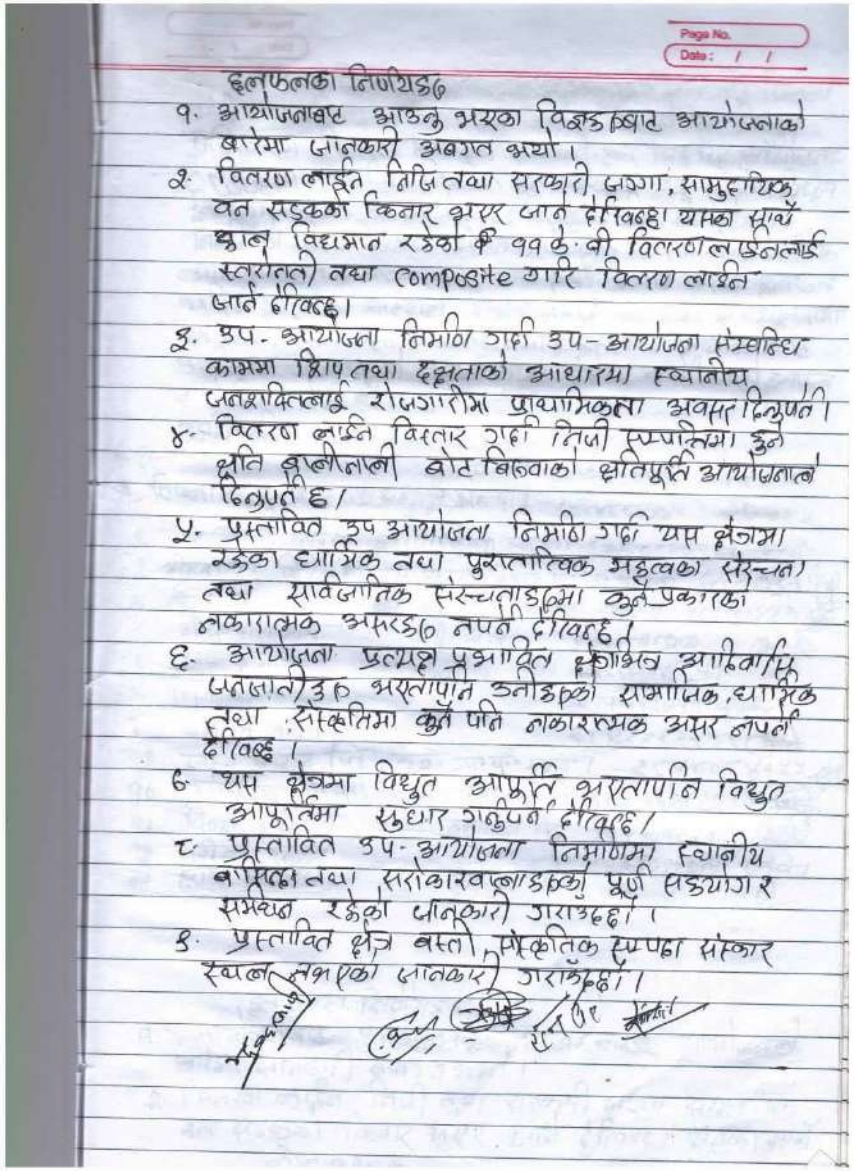
७. प्रस्तावित क्षेत्र वरपरी सांस्कृतिक सम्पदा संरक्षण स्थल नभएको जानकारी गराईएको छ।



आज मिति ३०७८।१०।१८ गते का दिन जाजरकोट जिल्ला भेरी नगरपालिका वडा नं ४ को गैरीखालमा नेपाल विद्युत प्राधिकरण वितरण पुरानो स्तरोन्नती तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुहु-समैला विद्युत वितरण लाइन उप-आयोजना (वितरण लाईन। सब ट्रेसन) निर्माणको शिलान्यास। भौतिक जोखिक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्न सक्ने प्रभाव बारेको छलफल भेरी न.पा वडा नं ४ का अध्यक्ष श्री रम्भ जंगबाड ज्यूको अध्यक्षतामा भेरी न्यिन सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञहरुको सहभागितामा देहाय बमोजिमको छलफल र टिपोट गरेको हो।

उपस्थिति

क्र.स	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१.	रम्भ जंगबाड	वडा अध्यक्ष भे.न.पा ४	९८४८७४६६६	
२	विष्णु कुमार भंडेल	वडा सचिव "	९८६८०४४९८१	
३	भक्त बहादुर बाढी	वडा सदस्य "	९८६८७४४९८१	
४	वासुधन उमाए	"	९८६८७६६२६६	
५	जनक भण्डेल	"	९८६८०८६०१३	
६	सुरेस कुमार भंडेल	"	९८६३७४४२६६८	
७	इन्द्र राज्य खड्का	"	९८४८०६०९७१	
८	दुर्गा बहादुर नेपाल	"	९८४८२९५९५६६	
९	धन बहादुर शाही	"	९८६२४८६२८१	
१०	विष्णु के.सी	"	९८६७३७००४७४	
११	बालीका पोखरेल	"	९८६७६८०३६८	
१२	अचना धानक्का	"	९८४२३२२८२८	
१३	रुनवहादुर रावत	"		
१४	महेन्द्र बुढाढ	"	९८४०२८९४८४	
१५	नन्दु बाई	"		
१६	उदिराम विपली	समाजशास्त्री	९८४१४४३८६६	
१७	दिक्षा प्रधिकारी	वातावरण विद	९८४४०१८३००	
१८	नवीन गुरुङ	"	९८४३७४४९१९	
१९	रम्भ आछेकाटी	समाजशास्त्री		



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छलफलका निष्कर्ष

१. आयोजनाबारे आउनु भएका विद्युतीय आयोजनाको बारेमा जानकारी आदान भयो।

२. वितरण लाईन निर्माण तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार भएर जाने हुँदा यसका साथै खाली विद्यमान रहेको ११ के.भी. को वितरण लाईनलाई स्तरोन्नती तथा Composite गरि वितरण लाईन जाने हुँदा।

३. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित काममा प्रिफ तथा दक्षताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।

४. वितरण लाईन विस्तार गर्दा बिजुली सम्पर्कमा हुने क्षति बुझीनाली बोट बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।

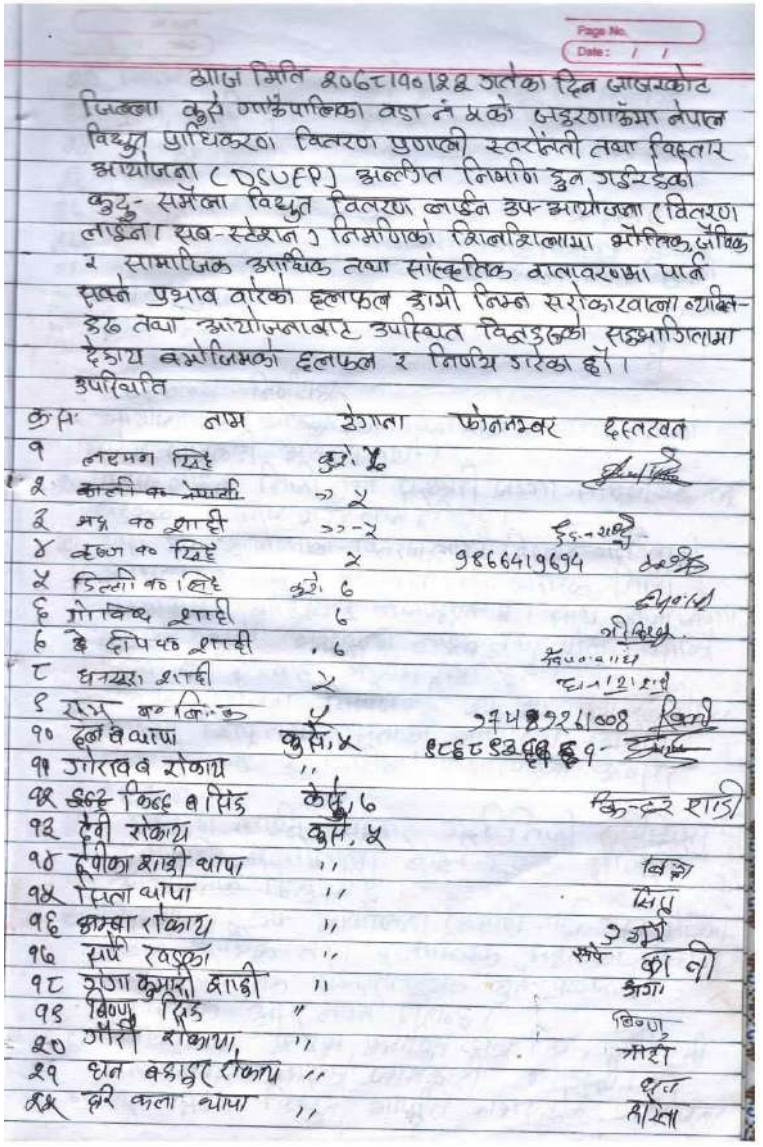
५. प्रस्तावित उप आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असरहरु नपर्ने हुँदा।

६. आयोजना प्रत्यक्ष प्रभावित क्षेत्रमा आदिवासि जनजाती हरु भएतापनि उनीहरुको सामाजिक, धार्मिक तथा संस्कृतिमा कुनै पनि नकारात्मक असर नपर्ने हुँदा।

७. यस क्षेत्रमा विद्युत आपूर्ति भएतापनि विद्युत आपूर्तिमा सुधार गर्नुपर्ने हुँदा।

८. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समर्थन रहेको जानकारी गराउनुहुने।

९. प्रस्तावित क्षेत्र वस्तु, सांस्कृतिक सम्पदा संरक्षण स्थल लगायतको जानकारी गराउनुहुने।

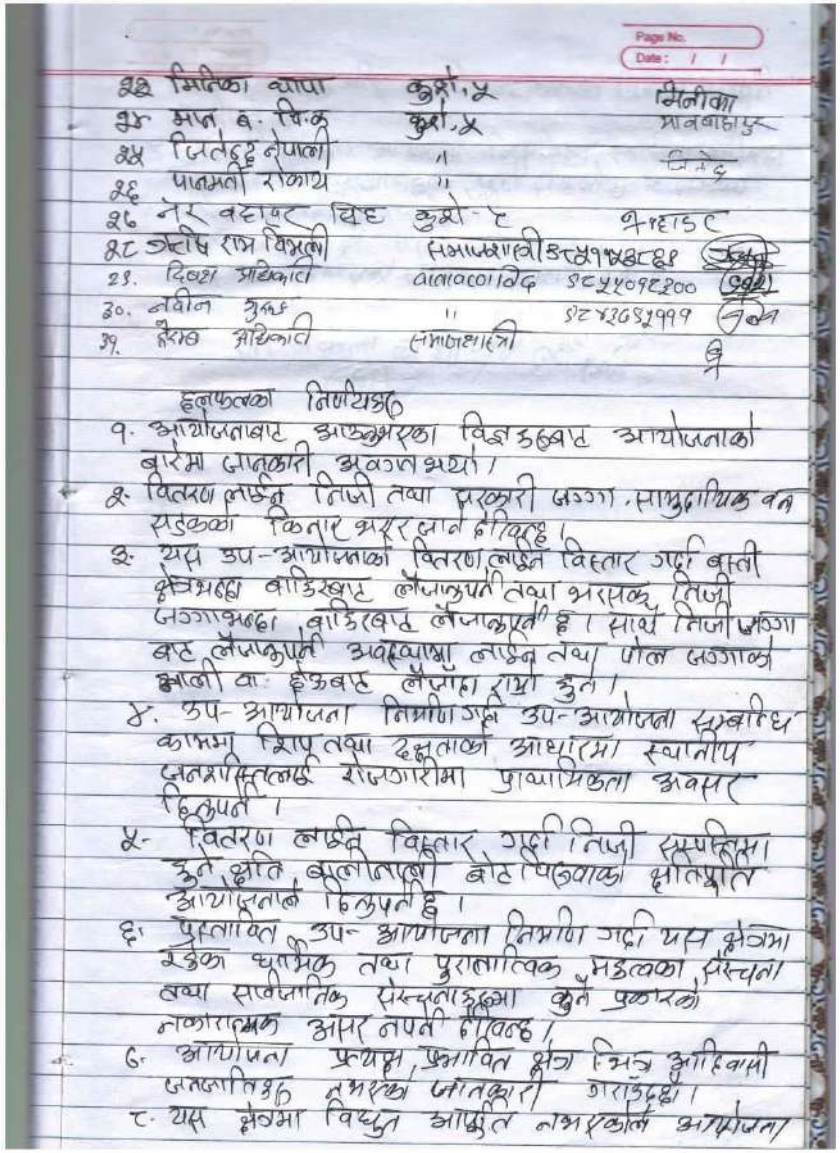


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आज मिति २०८८।१०।२४ गतेका दिन जाजरकोट जिल्ला कुडे गाउँपालिका वडा नं ५ को जङ्गराकाँमा नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुडु-समैला विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन। सब-स्टेशन) निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सक्ने प्रभाव बारेको छलफल गर्नु निम्न सरोकारवाला व्यक्ति-हरु तथा आयोजनाबारे उपस्थित विद्युतको सङ्गठितामा देहाय बमोजिमको छलफल र निर्णय गरेका हो।

उपस्थिति

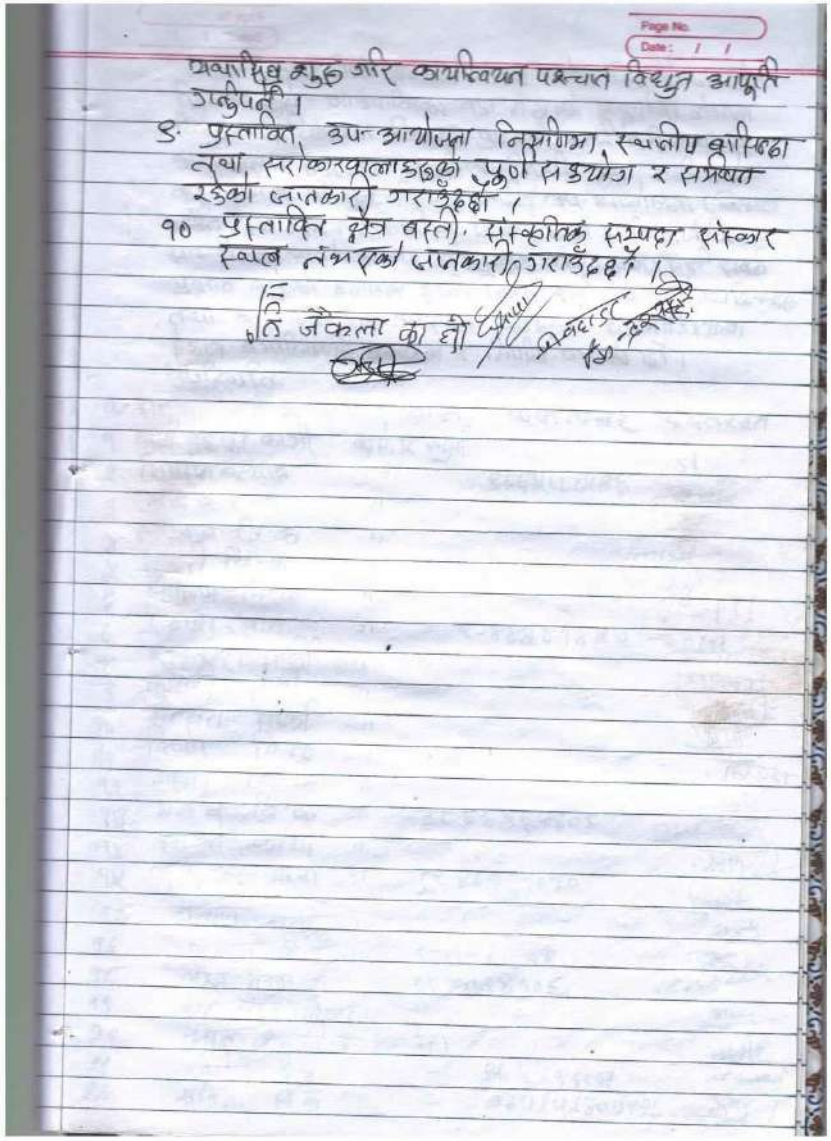
क्र.सं	नाम	ठेगाना	फोननम्बर	हस्ताक्षर
१	नरमान सिंह	कुडे, ५		
२	~~काली क० भण्डारी~~	" ५		
३	मन क० शाही	" ५		
४	हजुरा क० सिंह	" ५	9866419694	
५	दिल्ली क० सिंह	कुडे ६		
६	गोविन्द शाही	६		
७	के दीपक शाही	६		
८	धनबहादुर शाही	५		
९	राम ब० कि० क	५	9748926008	
१०	हर्क बहादुर थापा	कुडे, ५		
११	गोरखबहादुर रोकाय	"		
१२	~~डिल्ल~~ किल्ल बहादुर सिंह	कुडे, ६		
१३	देवी रोकाय	कुडे, ५		
१४	दुर्गा शाही थापा	"		
१५	सिता थापा	"		
१६	झमसा रोकाय	"		
१७	सर्पे रावल	"		
१८	रुपा कुमारी शाही	"		
१९	बिष्णु सिंह	"		
२०	गौरी रोकाय	"		
२१	धन बहादुर रोकाय	"		
२२	हरि कला थापा	"		



२३ मिठिका थापा कुर्सो, ५ मिनीका
२४ मान ब. विं.क कुर्सो, ५ मानबहादुर
२५ जितबहादुर नेपाली " जितेन्द्र
२६ पार्वती राजाय "
२७ नेर बहादुर विष्ट कुर्सो - ६ नेरबहादुर
२८ ऋषि राज विमली समाजसेवी ९८५४१७४८६१ ऋषि
२९. दिव्या अधिकारी वातावरणविद ९८५४०१६२०० दिव्या
३०. नवीन कुमार " ९८४२७४५१११ नवीन
३१. हिरण अधिकारी समाजशास्त्री हिरण

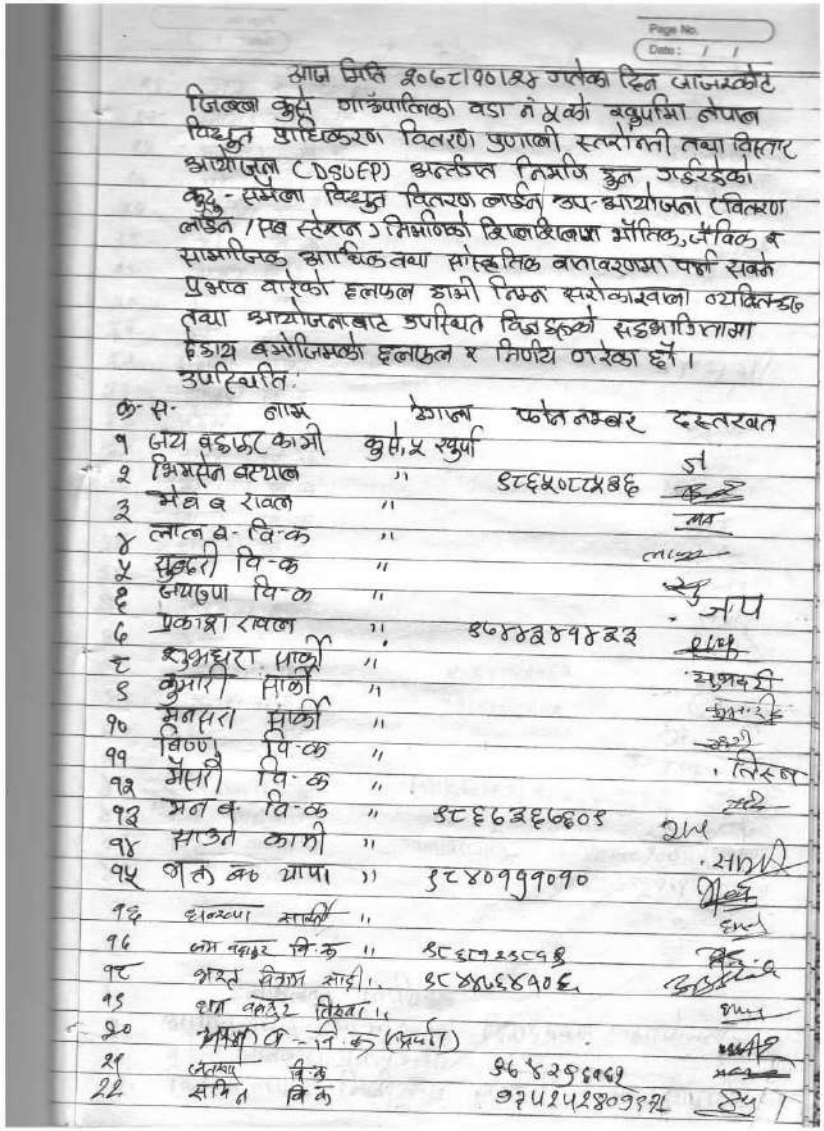
हलफका निर्णयहरु

१. आयोजनाबारे आफ्नुहरुका विचारहरुबारे आयोजनाको बारेमा जानकारी अवगत गर्ने।
२. वितरण लाईन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकका किनार भएर जान सक्ने देखिन्छ।
३. यस उप-आयोजनाको वितरण लाईन विस्तार गर्दा बस्ती क्षेत्रहरुमा बाधिरहेका लेजाकुपर्ने तथा भरपर्दो निजी जग्गाहरुमा बाधिरहेका लेजाकुपर्ने छ। साथै निजी जग्गा बाट लेजाकुपर्ने अवस्थामा लाईन तथा पोल जग्गाको धनी वा हकवाला लेजाँदा राख्नु पर्ने।
४. उप-आयोजना निर्माण गर्दा उप-आयोजना सुविधि कामका लागि तथा हकहरुको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।
५. वितरण लाईन विस्तार गर्दा निजी सम्पत्तिमा कुनै क्षति, असुलतालाई बोट पिरुवाको क्षतपूर्ति आयोजनाबाट दिनुपर्ने छ।
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असर नपर्ने देखिन्छ।
७. आयोजना प्रत्यक्ष, प्रभावित क्षेत्र भित्र आदिवासी जनजातिहरु नभएको जानकारी गराईयो।
८. यस क्षेत्रमा विद्युत आपूर्ति नभएकोले आयोजना



प्रभावित हुन गरि कार्यान्वयन पश्चात विद्युत आपूर्ति गर्नुपर्ने।
९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र सहभागिता रहेको जानकारी गराईयो।
१०. प्रस्तावित क्षेत्र वरपर सांस्कृतिक सम्पदा संरचना रहेको नभएको जानकारी गराईयो।

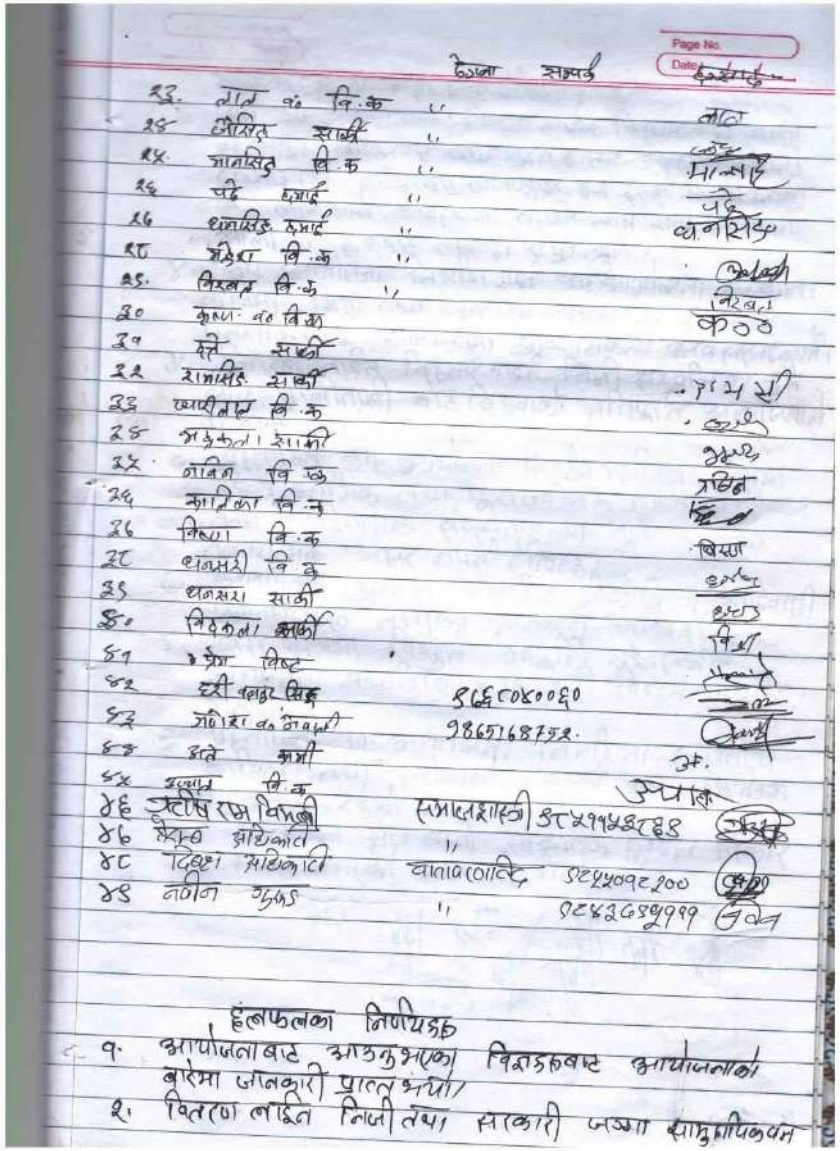
धन्यवाद



आज मिति २०८८।१०।२४ गतेका दिन जाजरकोट जिल्ला कुसे गाऊँपालिका वडा नं ४ को बस्तुभिन्न नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अर्न्तगत निर्माण हुन गईरहेको कुडु - समैला विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन / सब स्टेशन) निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्न सक्ने प्रभाव बारेको हलफल गर्नु निम्न स्थानीयस्तरका व्यक्तिहरु तथा आयोजनाबाट प्रभावित विद्युतिकरण सहभागितामा हिडाइ बस्तीमध्ये हलफल र निर्णय गरेका हौं।

उपस्थिति:

क्र.स.	नाम	ठेगाना	फोन नम्बर	दस्तखत
१	जय बहादुर कामी	कुसे, २ खुर्पा		
२	भिमसेन बस्याल	"	९८६५०८८४४६	
३	मेच व रावत	"		
४	लालब- वि·क	"		
५	सुकदेरी वि·क	"		
६	जगदिश वि·क	"		
७	प्रकाश रावल	"	९८४४४४४४२२	
८	सुअहरा पार्की	"		
९	कुमारी पार्की	"		
१०	मनसरा पार्की	"		
११	विष्णु वि·क	"		
१२	मैसी वि·क	"		
१३	मन ब वि·क	"	९८६३६६०६०९	
१४	साउत कामी	"		
१५	गोत ब० थापा	"	९८४०१९१०१०	
१६	धनरुपा सार्की	"		
१७	लाल बहादुर वि·क	"	९८६०१३८८१४	
१८	गायत्री विश्वा सार्की		९८४५६४१०६	
१९	धन बहादुर विश्वा	"		
२०	भक्ति वि·क (अर्पणा)			
२१	लक्ष्मण वि·क		९६४२९६१६१	
२२	समित वि·क		९७५१५४४०१९१५	

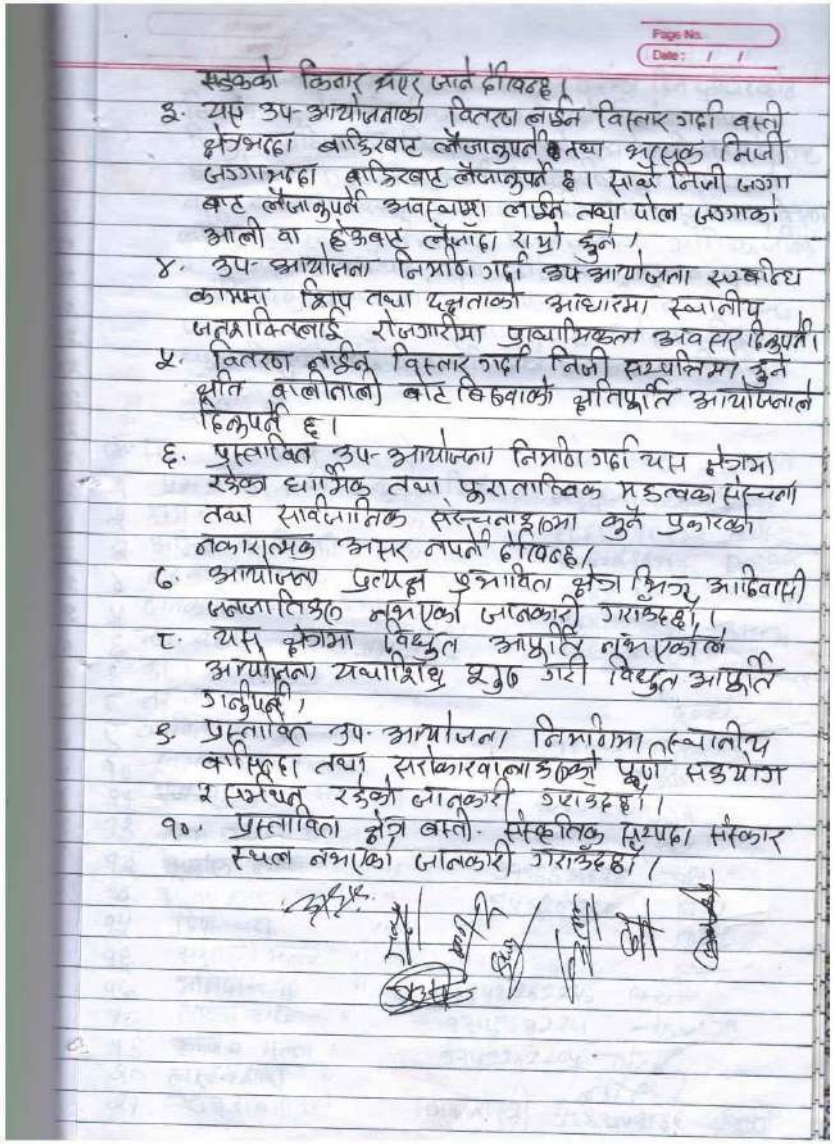


ठेगाना सम्पर्क

२३	लाल ब० वि·क	"	
२४	अमित सार्की	"	
२५	जानसिङ वि·क	"	
२६	चंदे बुढाई	"	
२७	धनसिङ बुढाई	"	
२८	मोहरा वि·क	"	
२९	विरबल वि·क	"	
३०	कृष्ण ब० वि·क		
३१	दिते सार्की		
३२	रामसिङ सार्की		
३३	ज्यापीलाल वि·क		
३४	अर्जुनलाल सार्की		
३५	गोविन्द वि·क		
३६	कालिका वि·क		
३७	विष्णु वि·क		
३८	धनसरी वि·क		
३९	धनसरा सार्की		
४०	विरेन्द्रलाल सार्की		
४१	प्रेम विष्ट		
४२	धरी बहादुर सिंह	९८६८०४००६०	
४३	जोगिरा ब० अधिकारी	९८६५१६८७३२	
४४	मते कामी		
४५	[illegible] वि·क		
४६	सन्तोष राम विष्टकी	सामालटहाटी ९८४१५४४२६४	
४७	सैनुद्दिन अधिकारी	"	
४८	दिलिप अधिकारी	चातारतोलि ९८५५०१८२००	
४९	नवीन गुरुङ	" ९८४२८३४५१९९	

हलफलका निर्णयहरु

१. आयोजनाबाट आउनुभएका विद्युतिकरण आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. वितरण लाईन निजी तथा सार्वजनिक जग्गा हुदाखुदै



सडकको किनार भएर जाने हो भने हुन्छ।

२. यस उप-आयोजनाको वितरण लाईन विस्तार गर्दा बस्ती क्षेत्रभन्दा बाहिरबाट लैजानुपर्ने तथा अत्यधिक निजी जग्गाभन्दा बाहिरबाट लैजानुपर्ने छ। सार्वजनिक निजी जग्गा बाट लैजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको आली वा हेक्बर लैजाँदा राम्रो हुने।

४. उप-आयोजना निर्माण गर्दा उप आयोजना स्वकोष्य कामका लिए तथा दक्षताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।

५. वितरण लाईन विस्तार गर्दा निजी सम्पत्तिमा हुने क्षति बापतको बाट बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।

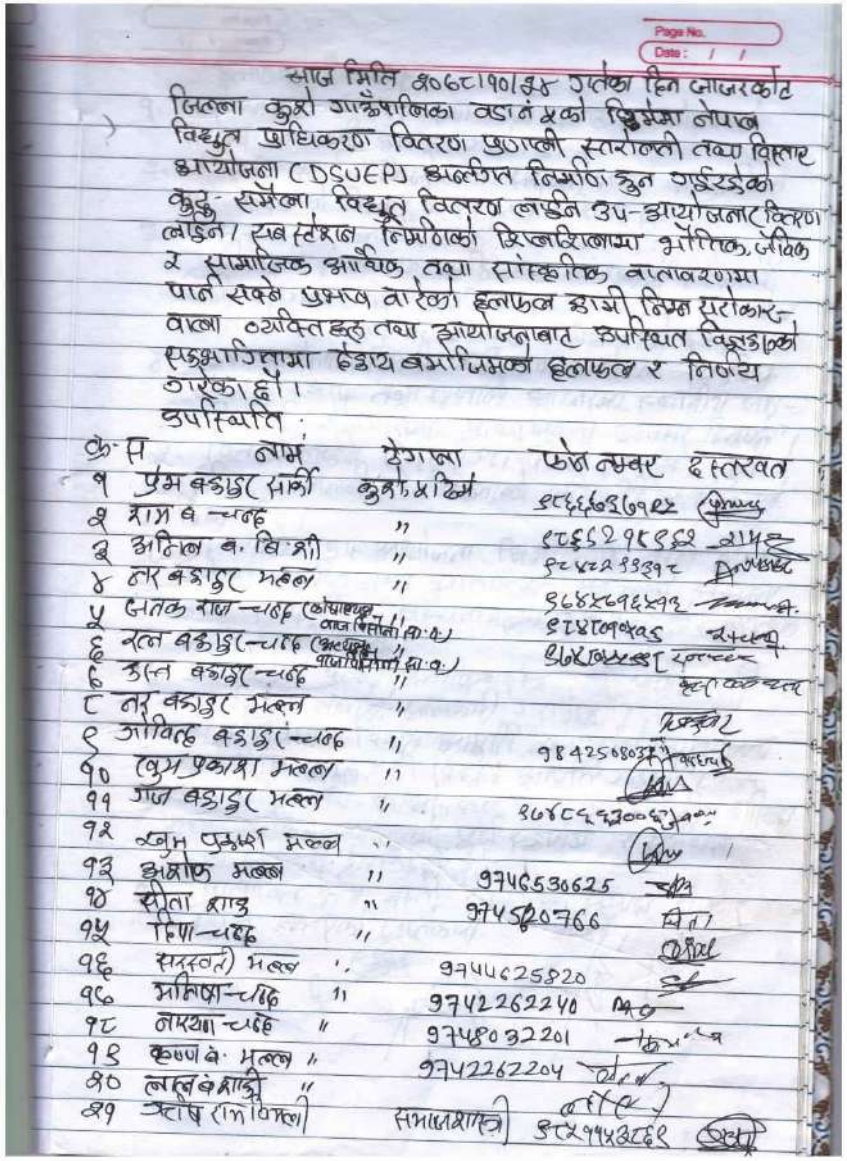
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सांस्कृतिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असर नपर्ने हो भने हुन्छ।

६. आयोजना प्रभावित क्षेत्र भित्र आदिवासी जनजातिहरु नभएको जानकारी गराईएको छ।

८. यस क्षेत्रमा विद्युत आपूर्ति नभएकोले आयोजना सम्पन्न भए पछि विद्युत आपूर्ति हुनेछ।

९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय कार्यालय तथा सरोकारवालाहरुको पूर्ण सहयोग र समन्वय रहेको जानकारी गराईएको छ।

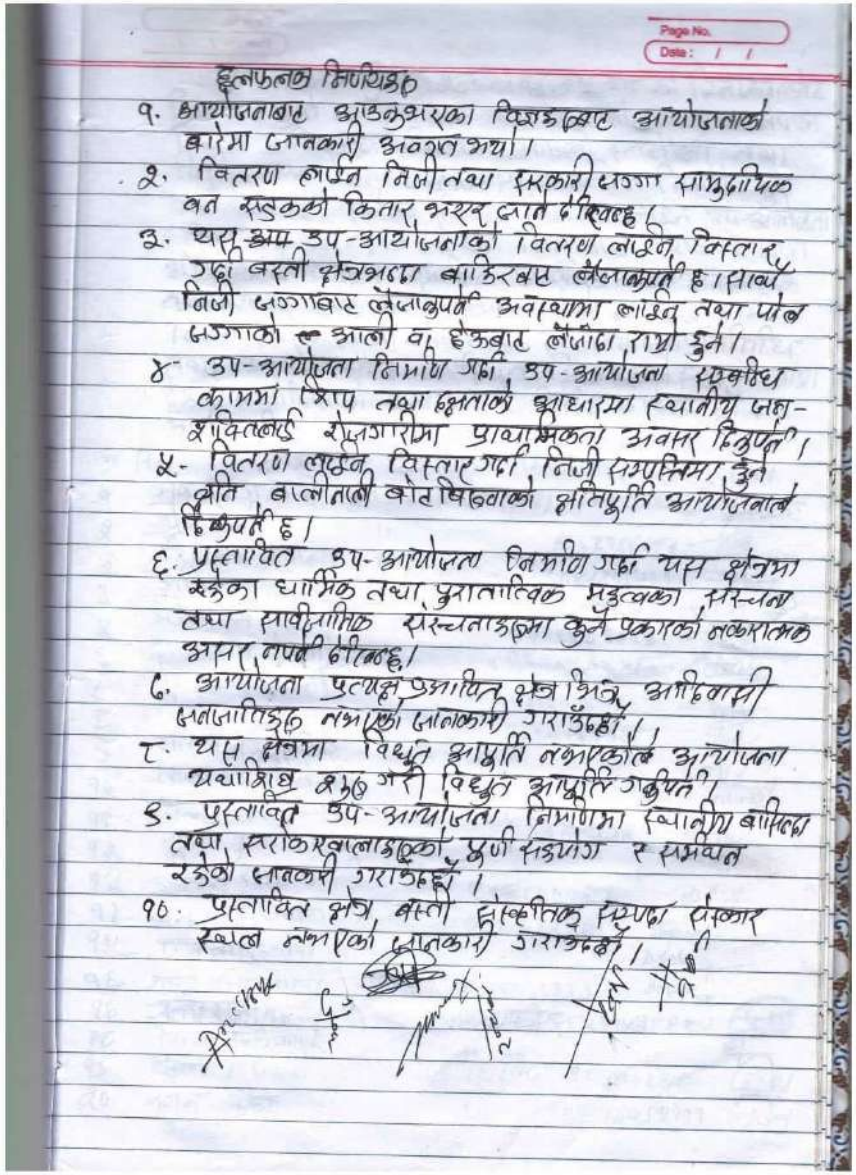
१०. प्रस्तावित क्षेत्र वरपर सांस्कृतिक सम्पदा संस्कार स्थल नभएको जानकारी गराईएको छ।



साझा मिति ०७८।१०।१५ गतेका दिन जाजरकोट जिल्ला कुसे गाउँपालिका वडा नं ४ को सिमाना नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुडु-समैला विद्युत वितरण लाईन उप-आयोजनाद्वारा लाईन। एवं स्टेशन निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पार्ने सक्ने प्रभाव बारेको छलफल गर्न निम्न सरोकार-वाला व्यक्तिहरु तथा आयोजनाबाट प्रभावित विभिन्न संरचनाहरुमा देहाय बमोजिमको छलफल र निर्णय गरिएको छ।

उपस्थिति :

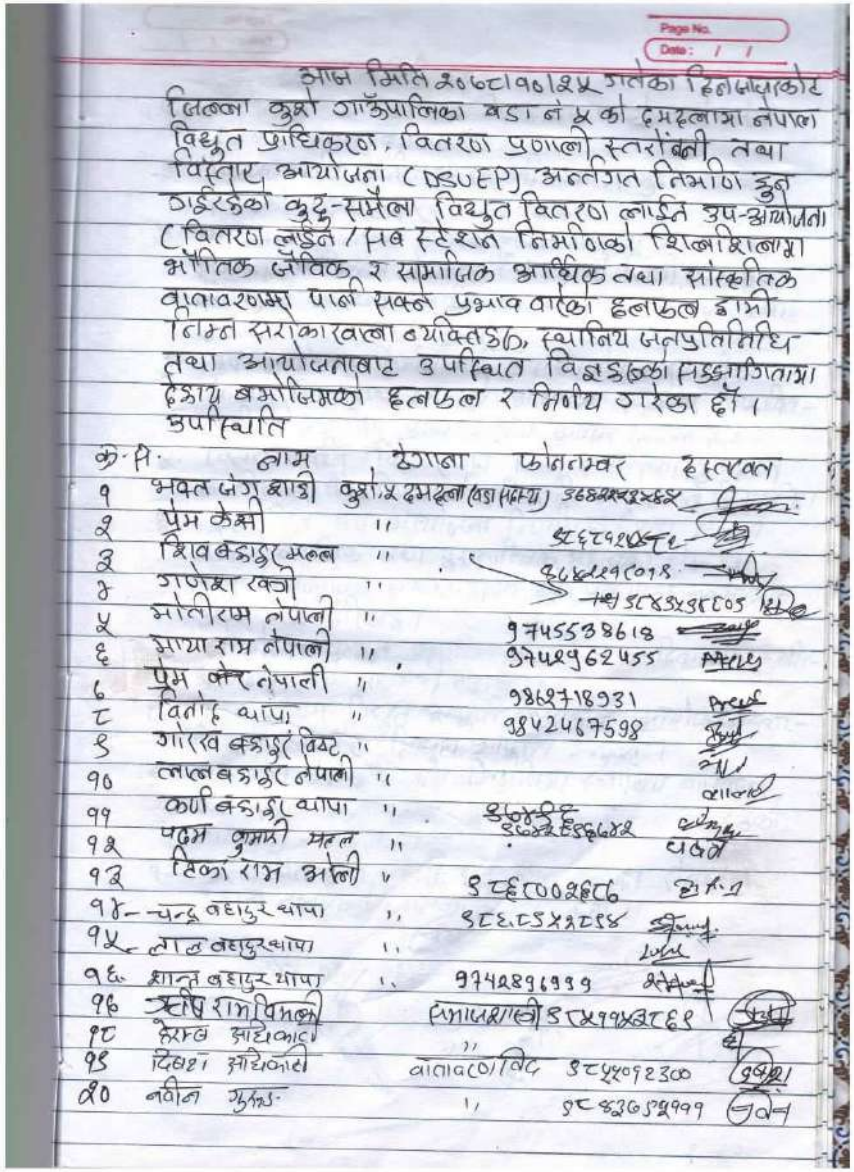
क्र.सं	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	प्रेम बहादुर सार्की	कुसे, ४ जाजरकोट	९८६६७३७१९२	
२	रामबहादुर चन्द	"	९८६९२९६९९२	
३	अम्बिका बि.सी	"	९८४२२९३३१८	
४	लाल बहादुर मल्ल	"	९७६४८६१६४१	
५	धनक राज चन्द (लेखापढ्ने)	वडा सचिव वडा नं ४	९८४८१७४२५	
६	रत्न बहादुर चन्द (अध्यक्ष)	वडा नं ४	९७४२७४४८१२	
७	कुल बहादुर चन्द	"		
८	नर बहादुर मल्ल	"		
९	जगिवन्द बहादुर चन्द	"	९८४२५०८०३१	
१०	खुम प्रकाश मल्ल	"		
११	गज बहादुर मल्ल	"	९७८८६३००६१	
१२	रनुम पुकुमा मल्ल	"		
१३	अशोक मल्ल	"	९७४६५३०६२५	
१४	सीता शाह	"	९७५४२०७६६	
१५	दिपा चन्द	"		
१६	सरस्वती मल्ल	"	९७५५६२५८२०	
१७	भानिषा चन्द	"	९७४२२६२२४०	
१८	नरेश चन्द	"	९७५४०३२२०१	
१९	कृष्ण बे. मल्ल	"	९७४२२६२२०५	
२०	लालबहादुर	"		
२१	सन्तोष रानाविष्ट	समाजसेवी	९८४९५५३८६९	



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छलफलका निष्कर्षहरु

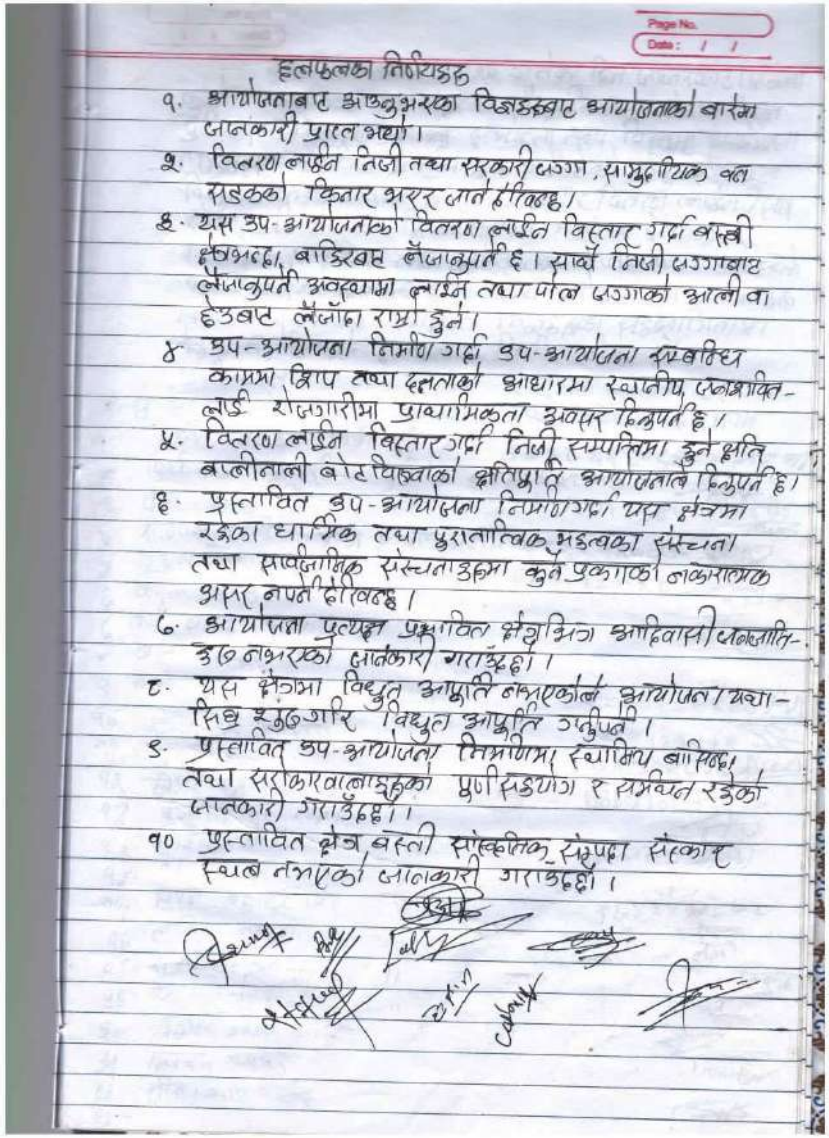
१. आयोजनाबारे आकर्षकका विद्युतीकरण आयोजनाको बारेमा जानकारी अवगत गर्ने।
२. वितरण लाईन निजी तथा सरकारी सरकार सार्वजनिक वन सडकको किनार भएर जाने देखिन्छ।
३. यस ~~आय~~ उप-आयोजनाको वितरण लाईन विस्तार, यहाँ बस्ती क्षेत्रभरमा बाक्लिएर रहेको देखिन्छ। साथै निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको ~~मा~~ आली वा हकवाला लैजाँदा राम्रो हुने।
४. उप-आयोजना निर्माण गर्दा, उप-आयोजना एकीकृत कामका लिए तथा क्षमताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।
५. वितरण लाईन विस्तार गर्दा, निजी सम्पत्तिमा हुने क्षति बापतको वार्ता विधिवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने हुन्छ।
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सांस्कृतिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असर नपर्ने देखिन्छ।
७. आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजातिहरु नभएको जानकारी गराउँछन्।
८. यस क्षेत्रमा विद्युत आपूर्ति नभएकोले आयोजना प्रभावित क्षेत्र भरी विद्युत आपूर्ति गरिने।
९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समर्थन रहेको जानकारी गराउँछन्।
१०. प्रस्तावित क्षेत्र, बस्ती ऐतिहासिक सम्पदा संरचना स्थल नभएको जानकारी गराउँछन्।



आज मिति २०८८।०१।२५ गतेका दिनको कोट लिक्का कुडो गाउँपालिका वडा नं ५ को समहलामा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुने ठाईरुको कुडु-समैला विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन / Sub Station निर्माणको शिलान्यासमा भौतिक जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पार्ने सक्ने प्रभाव बारेको हलफल हामी निम्न सरोकारवाला व्यक्तिहरु, स्थानिय जनप्रतिनिधि तथा आयोजनाबाट उपस्थित विज्ञहरुको सहभागितामा ठाईरु वस्तीमाको हलफल र निर्णय गरेका हौं।

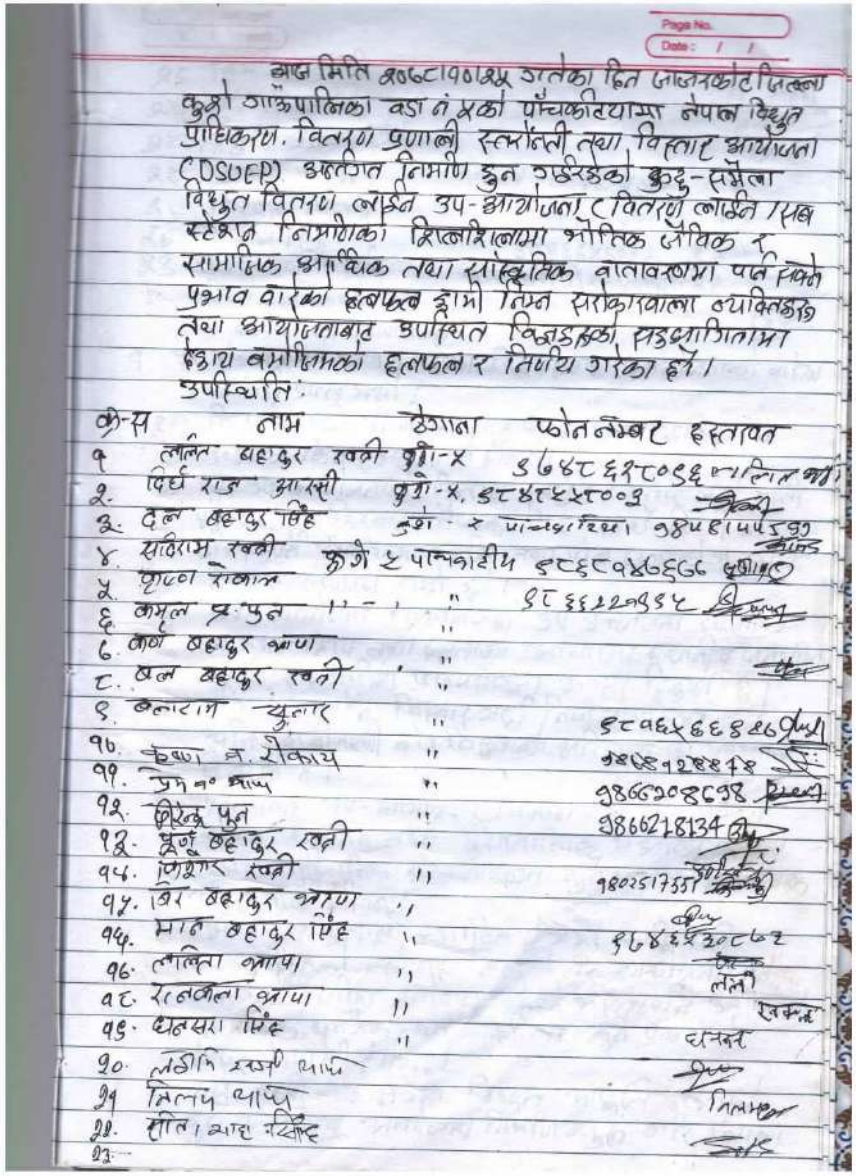
उपस्थिति

क्र.नि.	नाम	ठेगाना	फोननम्बर	हस्ताक्षर
१	भक्त जंग थापा	कुडो.५ समहला (वडा नम्बर)	३६४४४४२४६२	
२	प्रेम केसी	"	९८६८१९८०१८	
३	शिव बहादुर मल्ल	"	९८४३५३८०५	
४	गणेश रक्सी	"		
५	मोतीराम नेपाली	"	९७४५५३८६१३	
६	माया राम नेपाली	"	९७४१९६२४५५	
७	प्रेम बहादुर नेपाली	"	९८६२७१८९३१	
८	विनोद थापा	"	९८४२५६७५९८	
९	गोरख बहादुर विष्ट	"		
१०	लाल बहादुर नेपाली	"		
११	कर्ण बहादुर थापा	"	९८१४३६ ६६८६४२	
१२	पदम कुमारी मल्ल	"		
१३	विका राम अधिकारी	"	९८६८००२६८६	
१४	चन्द्र बहादुर थापा	"	९८६८५३४८६४	
१५	लाल बहादुर थापा	"		
१६	शान्त बहादुर थापा	"	९७४२८९६९९९	
१७	ऋषि राम विनकोटी	सिमादारी	९८४१९४८६९९	
१८	सरस्वती अधिकारी	"		
१९	दिवश अधिकारी	वातावरणविद	९८५५०१२३००	
२०	नवीन गुरुङ	"	९८९३७३५९९९	



हलफलका निर्णयहरु

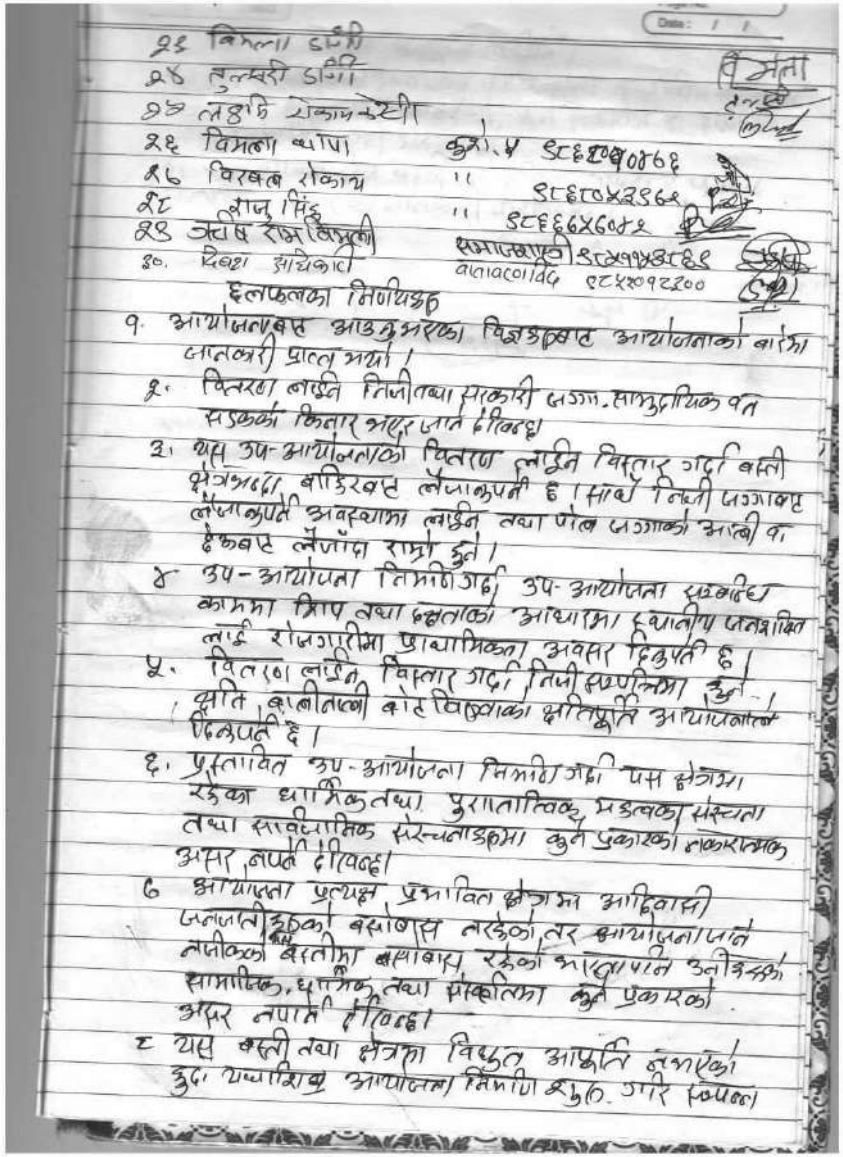
१. आयोजनाबारे अछुतभरका विज्ञहरुबाट आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. वितरण लाईन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार भएर जान हुनेछ।
३. यस उप-आयोजनाको वितरण लाईन विस्तार गर्दा बस्ती छुनेछ, बाटिरहर लैजानुपर्ने छ। सार्वे निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको आली वा हेउबाट लैजाँदा राम्रो हुने।
४. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित कामका क्रिया तथा दक्षताको आधारमा स्थानीय जनशक्ति-लाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने छ।
५. वितरण लाईन विस्तार गर्दा निजी सम्पत्तिमा हुने क्षति बालीनाली बोट बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असर नपर्ने हेरिनेछ।
७. आयोजना प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी जनजाति-हरु नभएको जानकारी गराइँदा।
८. यस क्षेत्रमा विद्युत आपूर्ति नभएकोले आयोजना यथा-सिघ्र सञ्चालनमा विद्युत आपूर्ति गरिपर्ने।
९. प्रस्तावित उप-आयोजना निर्माणमा स्थानिय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समर्थन रहेको जानकारी गराइँदा।
१०. प्रस्तावित क्षेत्र बस्ती सांस्कृतिक सम्पदा संरक्षण स्थल नभएको जानकारी गराइँदा।



आज मिति २०८८।०१।२५ गतेका दिन जोखरकोट गाउँपालिका वडा नं ४ का पाँचकीदयामा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुडु-समैला विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन / सब स्टेशन निर्माणका सिलसिलामा भौतिक जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सकिने प्रभाव बारेका हलफमा हामी तिन सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञहरुको सहभागितामा देहाय बमोजिमका हलफला र निर्णय गरेका हौं।

उपस्थिति:

क्र-स	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	ललित बहादुर रक्सी	कुडु-४	९७४८६४८०९६	
२	गिर्ध राज आरसी	कुडु-४,	९८४८४४००३	
३	देव बहादुर सिंह	कुडु - ४ पाल्पाटिया	९७४१४५६३७	
४	साहिराम रक्सी	कुडु ४ पाल्पाटीया	९८६८७४७६६७	
५	कृष्ण रोकाय	"		
६	कमल प्रसाद पुन	"	९८६६२०९४८	
७	कर्ण बहादुर थापा	"		
८	छत्र बहादुर रक्सी	"		
९	कलाराम चुलार	"	९८७६२६३४८७	
१०	कृष्ण ब. रोकाय	"	९८६६१२९९१४	
११	प्रेम ब० थापा	"	९७६६२०४८९४	
१२	धिरेन्द्र पुन	"	९८६६२४८३४	
१३	धुर्जु बहादुर रक्सी	"	९८०२८१७३३१	
१४	शिवकुमार रक्सी	"		
१५	वीर बहादुर थापा	"	९७४६३८०८७२	
१६	मान बहादुर सिंह	"		
१७	लक्ष्मी थापा	"		
१८	रत्नकला थापा	"		
१९	धनसरा सिंह	"		
२०	लक्ष्मि रक्सी थापा			
२१	निलम थापा			
२२	सीता थापा रोकाय			
२३				



२३	विमला डंगी	
२४	तुलसरी डंगी	
२५	लक्ष्मि रोकाय रक्सी	
२६	विमला थापा	कुडु-४ ९८६२०९०४८६
२७	विरबल रोकाय	" ९८६८०४२४८५
२८	राजु सिंह	" ९८६६५४८०४२
२९	जगेष राम विश्वकर्मा	समाजसेवी ९८४१५४९८६६
३०	दिक्षा आचेकारी	वातावरणविद् ९८४२०१८२००

हलफलका निर्णयहरु

१. आयोजनाबाट आउनसक्ने विज्ञहरुबाट आयोजनाको बारेमा जानकारी प्राप्त भयो।

२. वितरण लाईन निजीतथा सार्वजनिक जग्गा, सामुदायिक वन सडकको किनार भएर जाने देखिन्छ

३. यस उप-आयोजनाको वितरण लाईन विस्तार गर्दा बस्ती क्षेत्रभएको, बाक्लिरहेको र जनघनत्व बढी भएको क्षेत्रमा अवरोधका लाईन तथा पोल जग्गाको मात्रै वा केहिबढ़ी जोगाँदा राम्रो हुने।

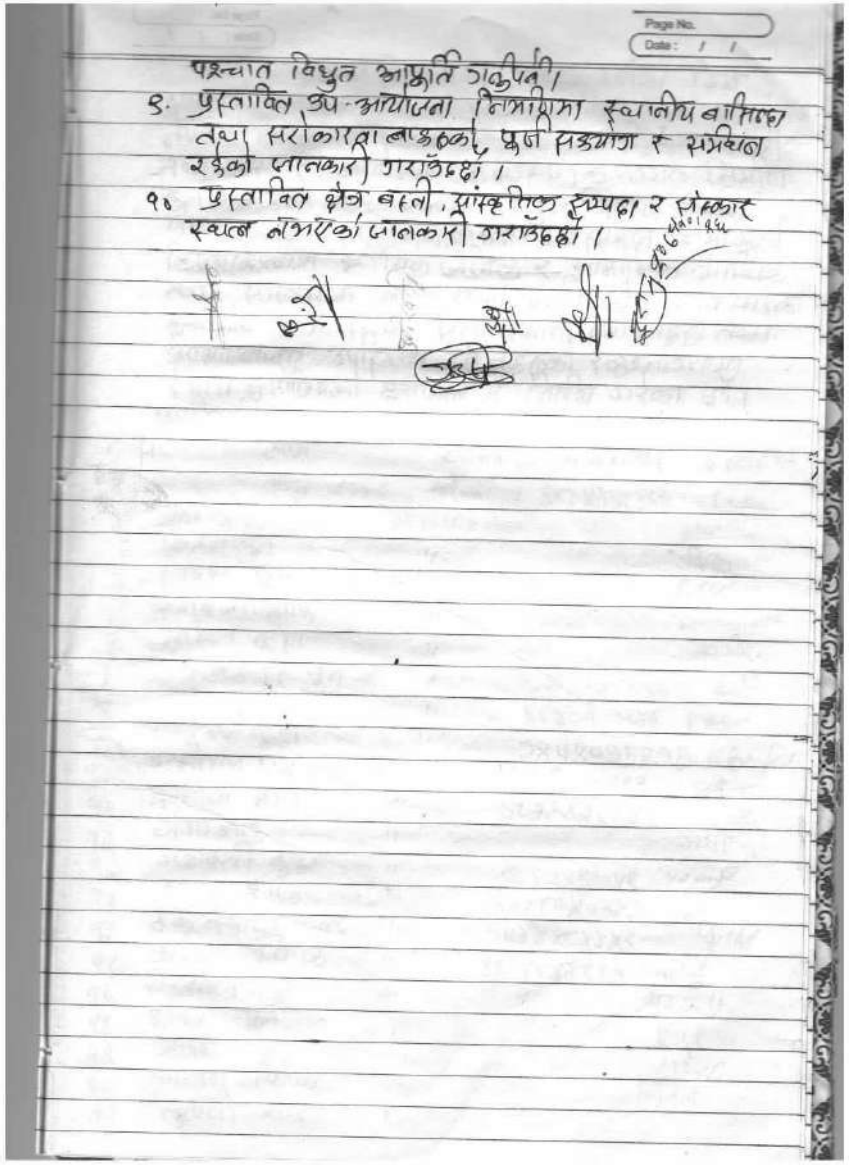
४ उप-आयोजना निर्माणगर्दा, उप-आयोजना सम्बन्धित कामका किसिम तथा क्षेत्रफलको आधारमा स्थानीय जनशक्ति लाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने छ।

५. वितरण लाईन, विस्तार गर्दा निम्न समस्याहरु पर्न सक्ने देखिन्छ, बालीनालीको बाटो बिग्रिएको क्षतिपूर्ति आयोजनाले दिनुपर्ने देखिन्छ।

६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सांस्कृतिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असर नपर्ने देखिन्छ।

७ आयोजना प्रत्यक्ष प्रभावित क्षेत्रमा आदिवासी जनजातिहरुको बसोबास नरहेको तर आयोजनाको नजिकको बस्तीमा बसोबास रहेका भएतापनि उनीहरुको सामाजिक, धार्मिक तथा सांस्कृतिक कुनै प्रकारको असर नपर्ने देखिन्छ।

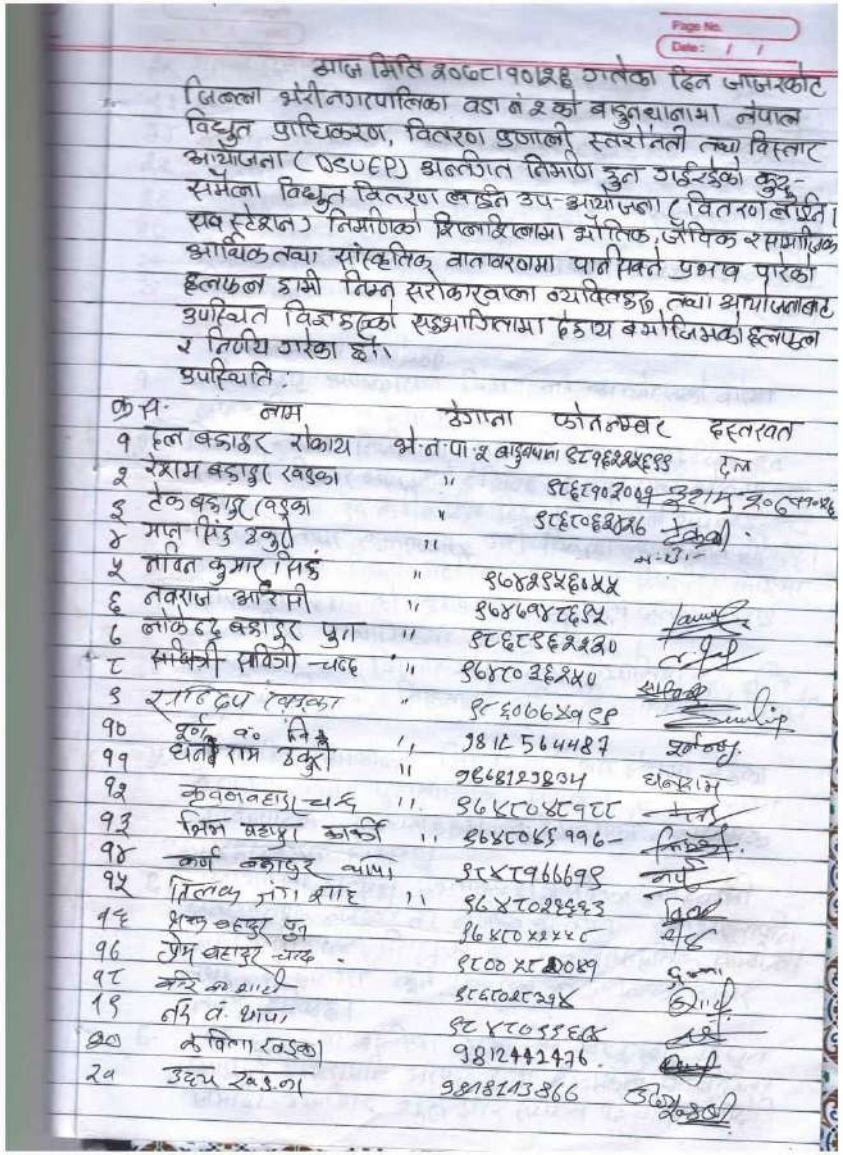
८ यस बस्ती तथा क्षेत्रका विद्युत आपूर्ति प्रणालीको कुनै पनि प्राविधिक आयोजना निर्माण हुँदा गरि रहेका



पश्चात विद्युत आपूर्ति गाकुलिने।

९. प्रस्तावित उप-आयोजना निर्माणका स्थानीय बासिन्दा तथा सरोकारवालाहरूको, पूर्ण सहयोग र समर्थन रहेको जानकारी गराउँदछौं।

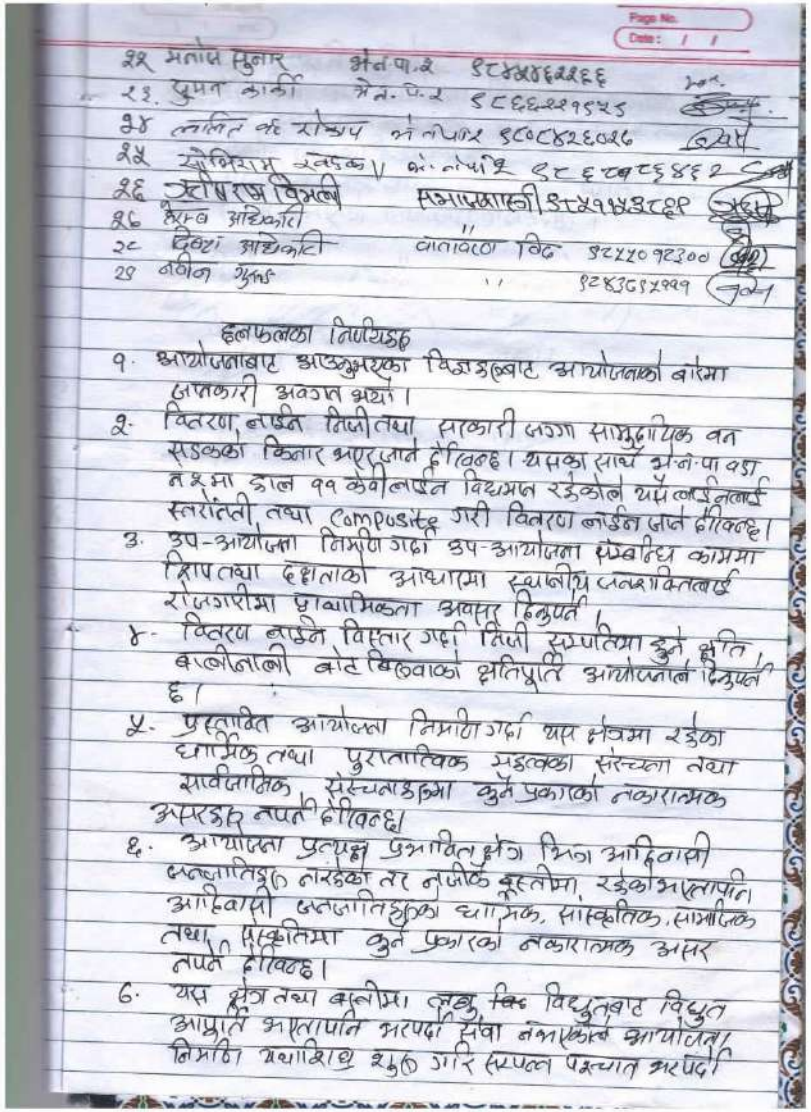
१०. प्रस्तावित क्षेत्र वरपरी, सांस्कृतिक सम्पदा र संस्कार रहेको जानकारी गराउँदछौं।



आज मिति २०८८।१०।२६ गतेका दिन जाजरकोट जिल्ला भेरीनगरपालिका वडा नं २ को बस्तुस्थानामा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुहु-समैला विद्युत वितरण लाइन उप-आयोजना (वितरण लाईन) सब स्टेशन) निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पार्नसक्ने प्रभाव पारेको हल्फल्ला साथै विभिन्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपयोगित विज्ञहरुको सुझावहरुलाई ध्यान दिई आयोजनाको हल्फल्ला र तिर्णय गरेको छौं।

उपस्थिति :

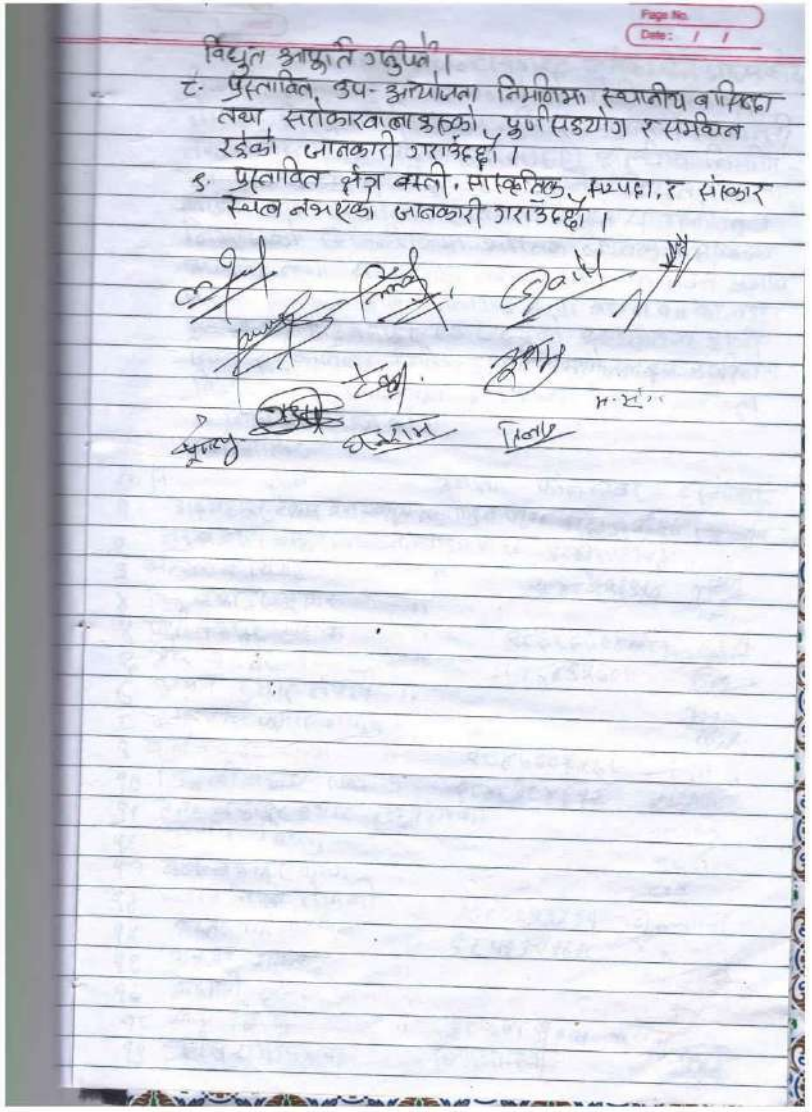
क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	हुल बहादुर रोकाय	भे.न.पा २ बाडुस्थाना	९८४६२२५९९९	हुल
२	रेराम बहादुर खड्का	"	९८६१९०२०४१	
३	टेक बहादुर खड्का	"	९८६१०६३५४६	
४	मान सिंह ठकुरी	"		
५	सावित कुमार सिंह	"	९७४२९५६०५५	
६	नवराज आरमी	"	९७४७९४८६५	
७	लोकेन्द्र बहादुर पुरा	"	९८६८९६२२३०	
८	सावित्री सविजा चन्द	"	९७४८०३६२५०	
९	रामहित रोकाय	"	९८४०६७९७९६	
१०	पूर्ण वं. निरौ	"	९८१८५६४४८७	
११	धनराम ठकुरी	"	९७६८१२३८३५	
१२	कुवलबहादुर चन्द	"	९७४८०४८९८८	
१३	भिम बहादुर कार्की	"	९७४८०६९९७६	
१४	कर्ण बहादुर थापा		९८४९७६६७९९	
१५	तिलक सिंह बोहरा	"	९७४८०२९६६३	
१६	शुक बहादुर पुन		९७४८०४४४८	
१७	प्रेम बहादुर चन्द		९८०० ४८ ३०८९	
१८	कमि क्षेत्री		९८६८०२८२९४	
१९	नरि वं. थापा		९८४८०५५६७८	
२०	नुविमा रोकाय		९८१२४१२४७६	
२१	उदम रोकाय		९८१८१२१३८६६	



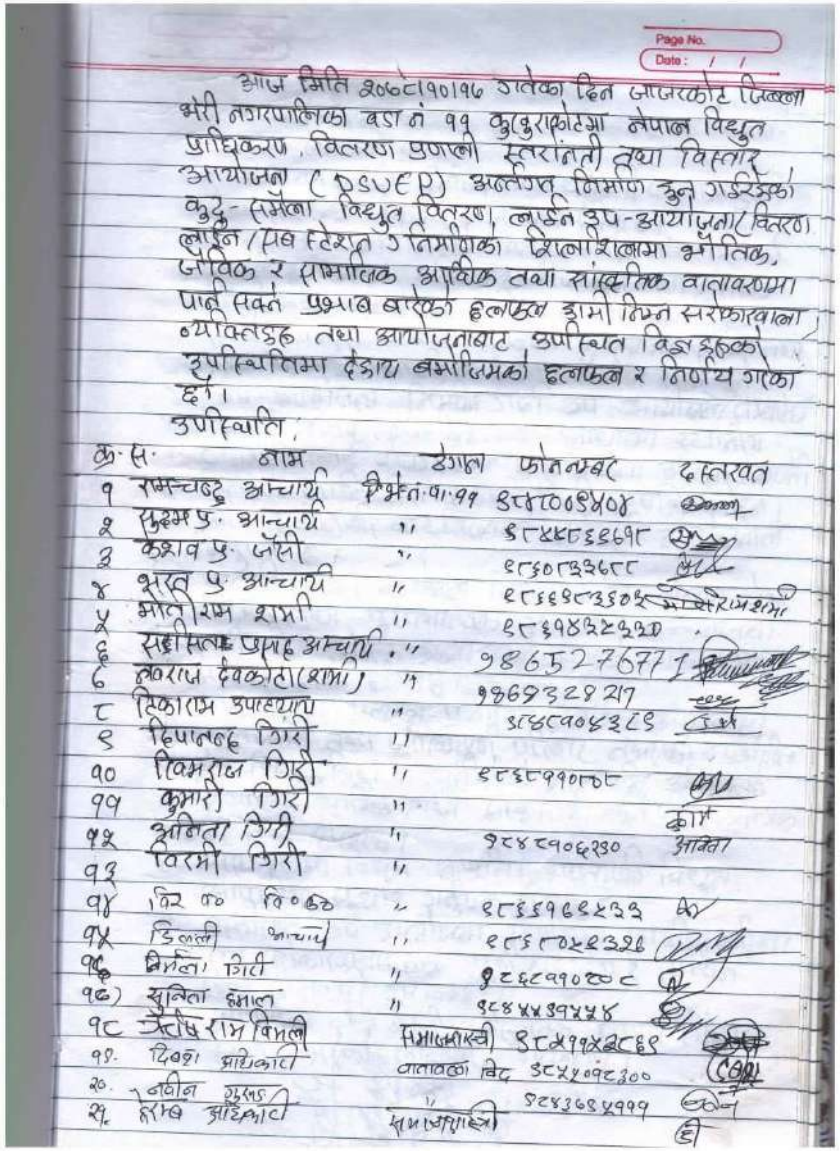
२२ मनोज सुनार अ.नं.पा.२ ९८४४४६२२६६
२३. पुष्प कार्की अ.न.पा.२ ९८६६४४१९२५
२४ ललित के.सी.प अ.नं.पा.२ ९८०८४२६०२६
२५ सुमित्रा श्रेष्ठ अ.नं.पा.२ ९८६८८६४६२
२६ देवराज विश्वकर्मा समाधासाली ९८४१४४३८६९
२७ हेमन्त अधिकारी "
२८ दिपेश अधिकारी वातावरण विद ९८४४०१२३००
२९ नवीन शुक्ल ९८४३७४४१९९

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१. आयोजनाबाट आक्रमणका विजकल्पबाट आयोजनाको बारेमा जानकारी अवगत गर्ने ।
२. वितरण लाईन निर्माण तथा सार्वजनिक वन क्षेत्रको किनार भएर जाने हुँदा यसका लागि अ.नं.पा वडा नं.मा ढाल ११ केभी लाईन विद्यमान रहेकोले यसै लाईनलाई स्तरोन्नती तथा Composite गरी वितरण लाईन लान सकिनेछ ।
३. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित कामका क्रियाकलाप तथा हेर्नाको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने ।
४. वितरण लाईन विस्तार गर्दा निजी सम्पत्तिमा क्षति, बालीनाली बोट बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ ।
५. प्रस्तावित आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक सङ्गठन संस्थाहरु तथा सार्वजनिक संस्थानहरुमा कुनै प्रकारको नकारात्मक असरहरु नपर्ने हुनेछ ।
६. आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजातिहरु नरहेका तर नजिक कुहतीमा रहेको अल्पसंख्यक आदिवासी जनजातिहरुमा धार्मिक, सांस्कृतिक, सामाजिक तथा परिस्थितिमा कुनै प्रकारको नकारात्मक असर नपर्ने हुनेछ ।
७. यस क्षेत्र तथा बस्तीमा लाग्ने कि विद्युतबाट विद्युत आपूर्ति आकस्मिक मर्मत्त सेवा नेपालको आयोजना निर्माण प्रक्रियाहरु हुँदा गरि सम्पन्न पश्चात मर्मत्त



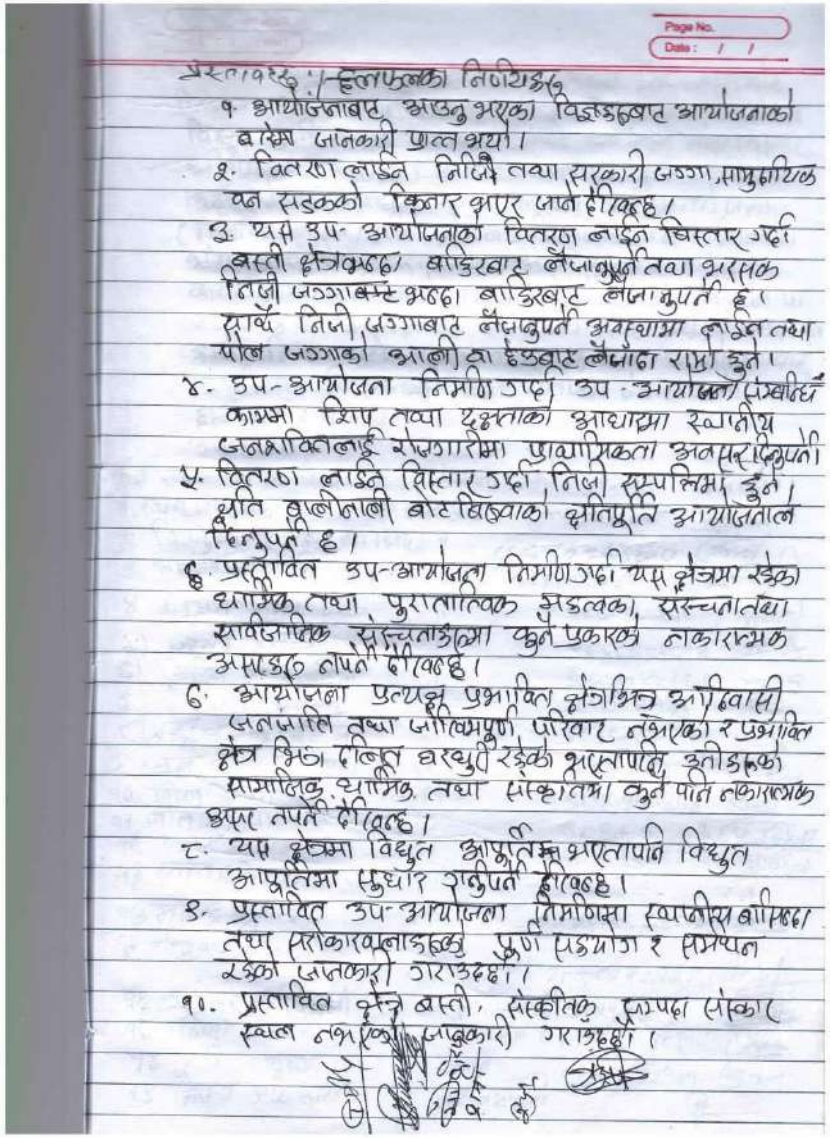
विद्युत आपूर्ति गर्नुपर्ने ।
८. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पुर्ण सहयोग र समन्वय रहेको जानकारी गराउनुहुने ।
९. प्रस्तावित क्षेत्र बस्ती, सांस्कृतिक, सम्पदा, र संरचना स्थल नभएको जानकारी गराउनुहुने ।



आज मिति २०७८।१०।१७ गतेका दिन जाजरकोट जिल्ला भेरी नगरपालिका वडा नं ११ कुडुराकोटमा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुने गइरहेको कुडु-समैला विद्युत वितरण लाईन उप-आयोजना वितरण लाईन/पस स्टेशन निर्माणका क्रियाकलापमा भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पार्ने सक्ने प्रभाव बारेको छलफल गर्न मिति सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञ टोलीको उपस्थितिमा देहाय बमोजिमको छलफल र निर्णय गरिएको हो।

उपस्थिति:

क्र.स.	नाम	ठेगाना	फोन नम्बर	दस्तखत
१	रामचन्द्र आचार्य	हिमत.पा.११	९८४८०९४०४	
२	सुरेन्द्र प्र. आचार्य	"	९८४८९६६१९	
३	केशव प्र. जोशी	"	९८३०१३२६८८	
४	भरत प्र. आचार्य	"	९८६९८३३०९	
५	भोलाराम शर्मा	"	९८६१९४२२३२०	
६	सहीसत्य प्रसाद आचार्य	"	9865276771	
७	हजारी दैवकोटा (शर्मा)	"	९८६९३२९२१७	
८	विकास उपाध्याय	"	९८४८७०४३८९	
९	दिपानन्द गिरी	"		
१०	विश्वराज गिरी	"	९८६८९१०८०८	
११	कुमारी गिरी	"		कार्य आवश्यक
१२	अमिता गिरी	"	९८४८९०६२३०	
१३	विरमी गिरी	"		
१४	कि० रा० वि०सं०	"	९८६९१६६४३३	
१५	डिल्ली आचार्य	"	९८६८०५९३२६	
१६	निर्मला गिरी	"	९८६८९१०९०८	
१७	सुनिता खाल	"	९८४४३९४५४	
१८	नैत्रोध राम विमली	समाजसेवी	९८४१५४२८६९	
१९	दिव्हा आधिकारी	वातावरण विद	९८४५०५८३००	
२०	नवीन शुरुवाड		९८४३६९४९९९	
२१	हरिष आधिकारी	समाजसेवी		



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१. आयोजनाबारे, आउन भएका विज्ञहरुबाट आयोजनाको बारेमा जानकारी प्राप्त भयो।

२. वितरण लाईन निर्माण तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार भएर जाने हो।

३. यस उप-आयोजनाको वितरण लाईन विस्तार गर्दा बस्ती क्षेत्रमहरु बढिरहेर, बेजानुपर्ने तथा अरुसंग निजी जग्गाबाट भएका बाढिरहेर बेजानुपर्ने हुन। यसैं निजी जग्गाबाट बेजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको आलीको डिलबाट बेजाने राखिने हुने।

४. उप-आयोजना निर्माण गर्दा उप-आयोजना प्रभावित क्षेत्रमा शिप तथा दक्षताका आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अनुसार दिनुपर्ने।

५. वितरण लाईन विस्तार गर्दा निजी सम्पत्तिमा, बुने, धुति बुलौनाली बाट विज्ञाको क्षतिपूर्ति आयोजनाले दिनुपर्ने हुन।

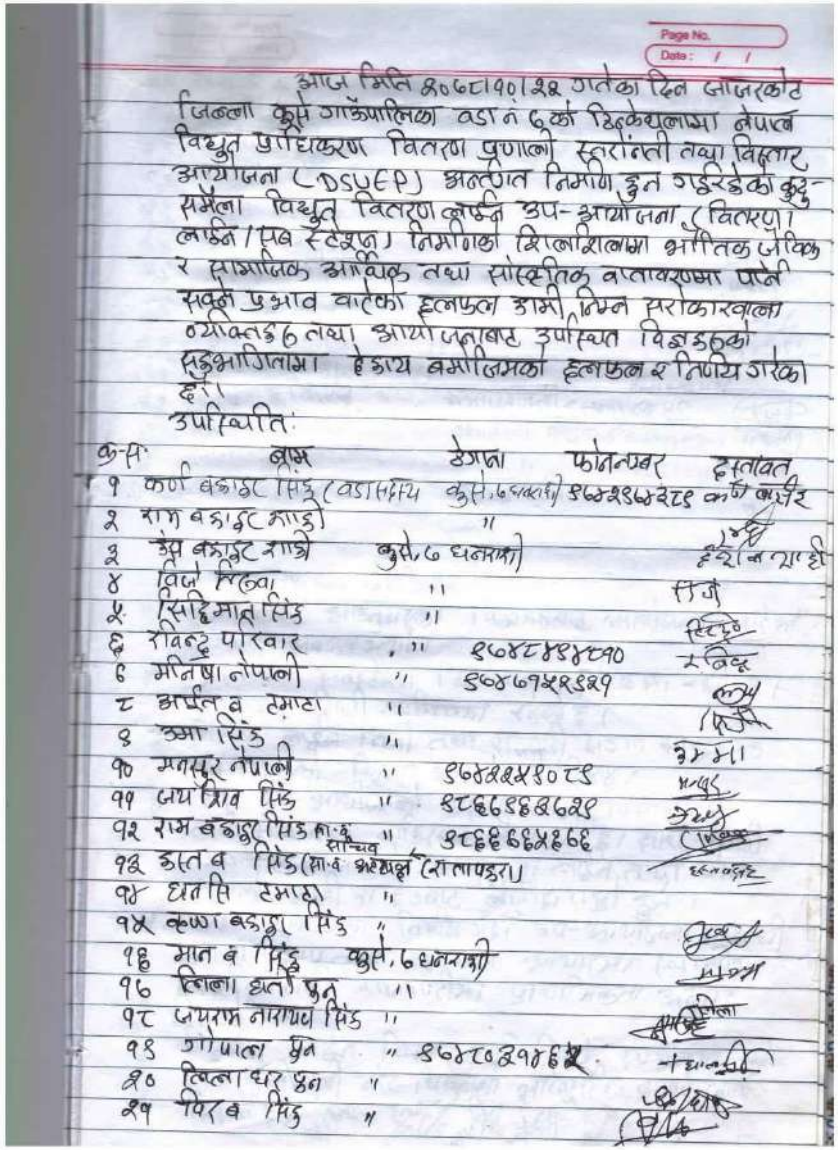
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका, सम्पदाहरु तथा सार्वजनिक सम्पत्तिहरुमा कुनै प्रकारको नकारात्मक असर नपर्ने हो।

७. आयोजना प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी जनजाति तथा जोखिमपूर्ण परिवार नरहेको र प्रभावित क्षेत्र भित्र दलित घरधुरी रहेको भएतापनि, उनीहरुको सामाजिक, धार्मिक तथा संस्कारमा कुनै पनि नकारात्मक असर नपर्ने हो।

८. यस क्षेत्रमा विद्युत आपूर्तिमा भएतापनि विद्युत आपूर्तिमा सुधार गर्नुपर्ने हो।

९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समर्थन रहेको जानकारी गराइयो।

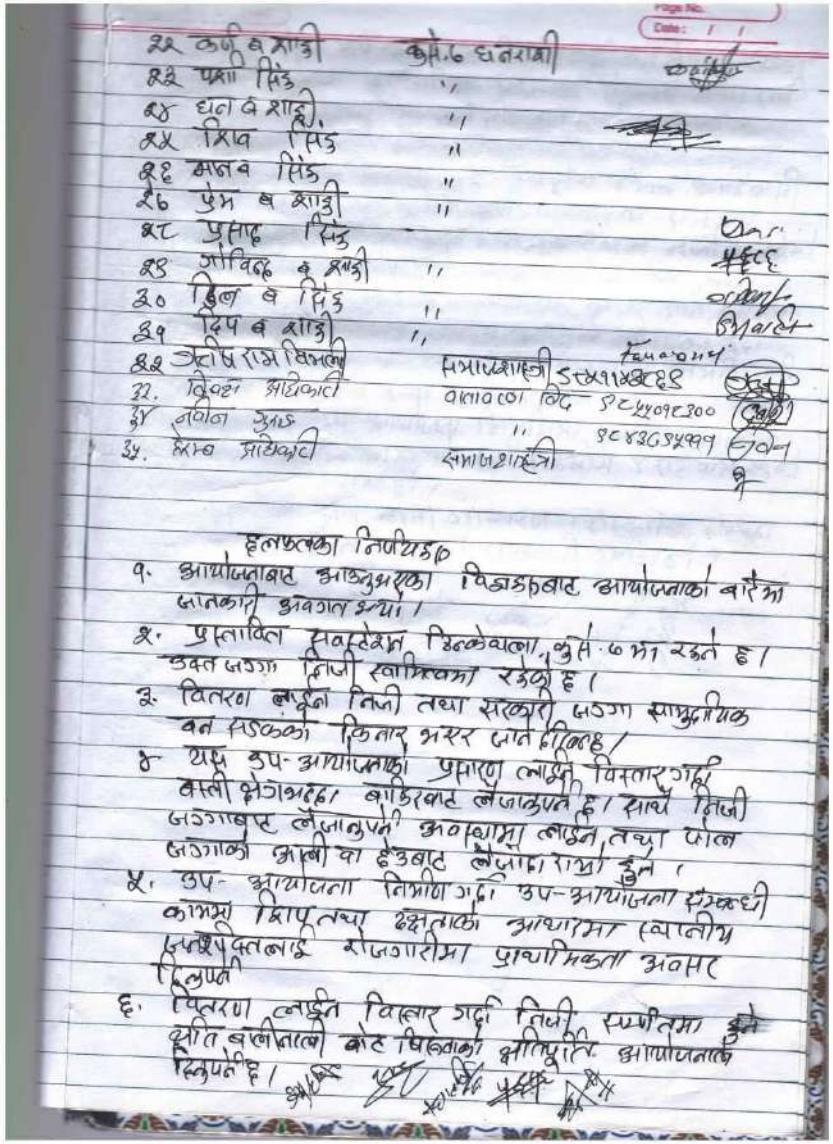
१०. प्रस्तावित क्षेत्र बस्ती, सांस्कृतिक सम्पदा संरक्षण स्थल नक्शा (जानकारी) गराइयो।



आज मिति २०८८।०१।२२ गतेका दिन जाजरकोट जिल्ला कुसे गाऊँपालिका वडा नं ६ को छिल्केचलामा नेपाल विद्युत प्राधिकरण वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुडु-समैला विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन / सब स्टेशन) निर्माणको सिलसिलामा भौतिक जोखिम र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सक्ने प्रभाव बारेका हलफल गर्न, निम्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञहरुको सहभागितामा हेडाय बमोजिमको हलफल र निर्णय गरेको हो।

उपस्थिति:

क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	कर्ण बहादुर सिंह (वडाध्यक्ष)	कुसे-६ धनराखी	९८४१९८२८६९	कर्ण बहादुर
२	राम बहादुर शाही	"		
३	देव बहादुर शाही	कुसे-६ धनराखी		
४	विजे सिंह	"		
५	सिद्धिमान सिंह	"		
६	रविन्द्र परिवार	"	९८४८४४४९९०	
८	मनिषा नेपाली	"	९८४७१५१९२९	
८	अर्जुन ब टमाटा	"		
९	आ सिंह	"		
१०	मनसुर नेपाली	"	९८४२१५१९०८९	
११	जय शिव सिंह	"	९८६८१९४२८२९	
१२	राम बहादुर सिंह (वा.उ सचिव)	"	९८६१८६५१८६	
१३	इतर ब सिंह (वा.उ अध्यक्ष) (सोताघरा)			
१४	धनसि टमाटा	"		
१५	कृष्ण बहादुर सिंह	"		
१६	मान ब सिंह	कुसे-६ धनराखी		
१७	लिला इतर थुन	"		
१८	जयराम नारायण सिंह	"		
१९	गोपाला थुन	"	९८४८२९४८३२	
२०	लिला धर थुन	"		
२१	पिर ब सिंह	"		



२२	कर्ण ब शाही	कुसे-६ धनराखी	
२३	पर्सा सिंह	"	
२४	धन ब शाही	"	
२५	शिव सिंह	"	
२६	मान ब सिंह	"	
२७	प्रेम ब शाही	"	
२८	प्रसाद सिंह	"	
२९	गोविन्द ब शाही	"	
३०	हिरा ब सिंह	"	
३१	दिप ब शाही	"	
३२	जगदिश राम विश्वकर्मा	सामाजशास्त्री	९८४१४४८६९
३३.	विपक्ष अधिकारी	वातावरण विद	९८५५०१८३००
३४	नविन कुमार	"	९८४३८३५४९१
३५.	हेरम अधिकारी	समाजशास्त्री	

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१. आयोजनाबारे आजुधुरुका विज्ञहरुबाट आयोजनाको बारेमा जानकारी अवगत भयो।

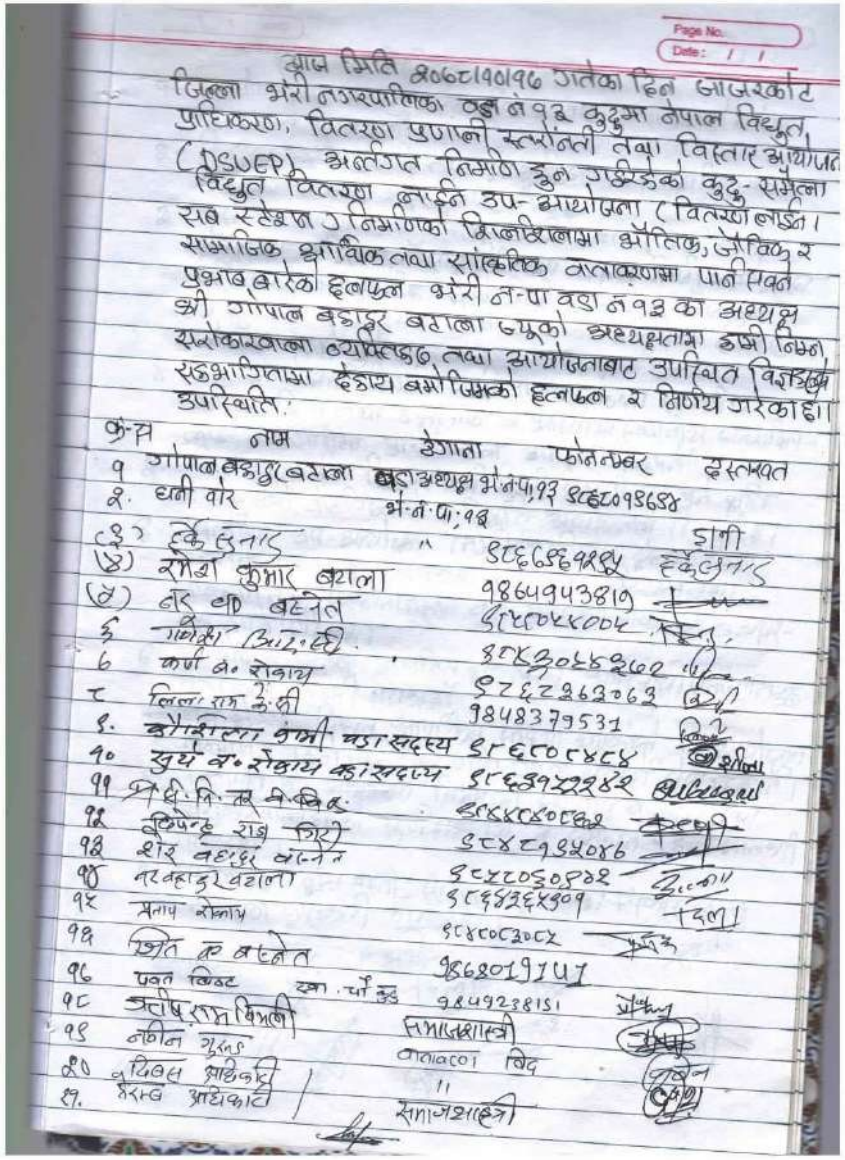
२. प्रस्तावित सबस्टेशन छिल्केचला, कुसे-६ मा रहने छ। उक्त जग्गा निजी स्वामित्वमा रहेको छ।

३. वितरण लाईन निजी तथा सरकारी जग्गा सामुदायिक वन सडकको किनार भएर जाने छ।

४. यस उप-आयोजनाको प्रशारण लाईन विस्तार गर्दा बाली क्षेतबारहरु बाधिएका छैनन्। साथै निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको आली का हुँदाबाट लैजाने राय्रो हुने।

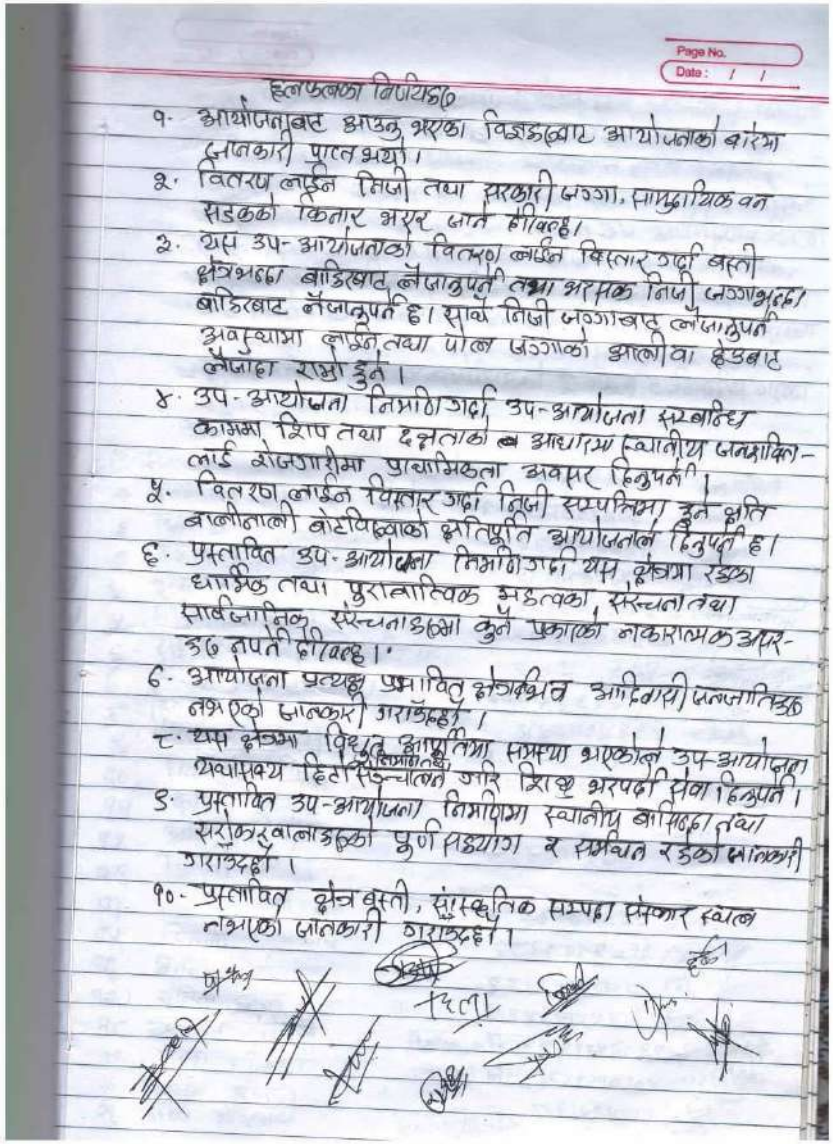
५. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धी कामहरु सिपमूलक तथा स्थानीय को आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने

६. वितरण लाईन विस्तार गर्दा तिथी, स्थानीय हुने क्षति बमोजिमको बेट विवादको व्यवस्थापन आयोजनाले गर्नुपर्ने छ।



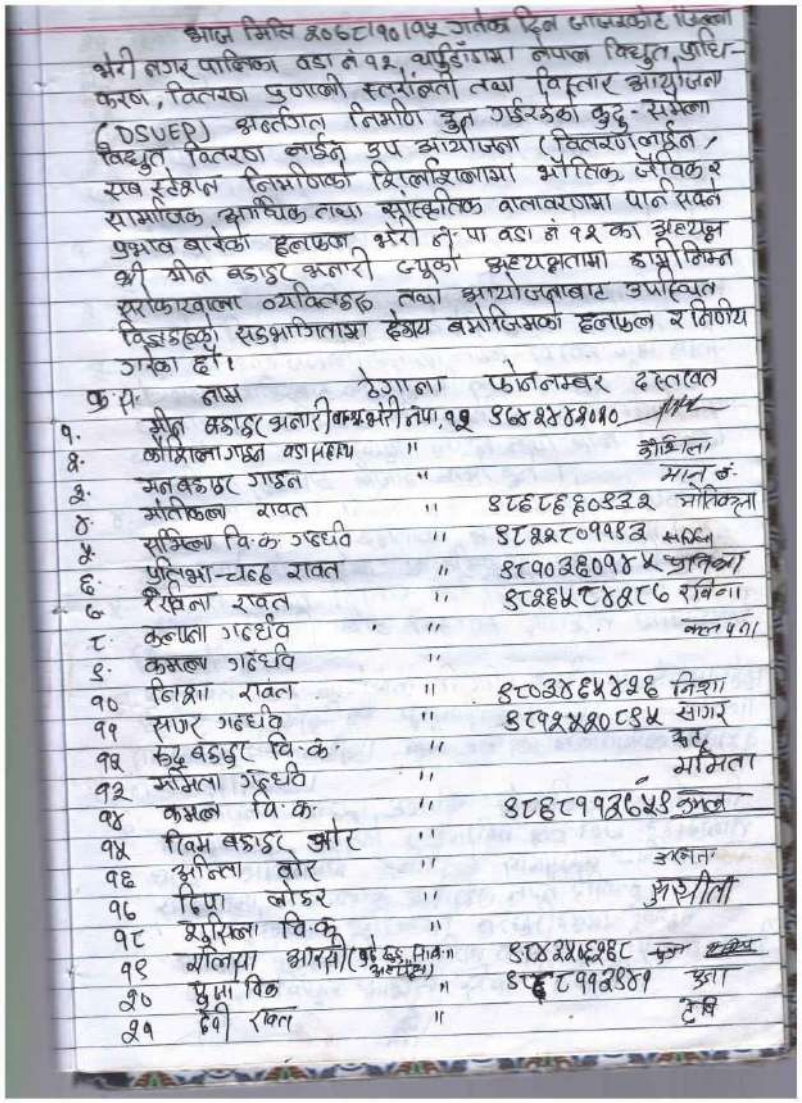
आज मिति २०८८।०१।१६ गतेका दिन जाजरकोट जिल्ला भेरी नगरपालिका वडा नं १३ कुदुमा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुदु- समैला विद्युत वितरण लाईन उप- आयोजना (वितरण लाईन) सब स्टेशन / निर्माणको क्रियाशिलतामा औतिक, जैविक र सामाजिक, आर्थिक तथा सांस्कृतिक वातावरणमा पार्न सक्ने प्रभाव बारेको हलफल भेरी न-पा वडा नं १३ का अध्यक्ष श्री गोपाल बहादुर बटाला ज्यूको अध्यक्षतामा तथा निम्न, सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित विज्ञहरुको उपस्थितिमा देहाय बमोजिमको हलफल र निर्णय गरिएको हो।

क्र.सं	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	गोपाल बहादुर बटाला	वडा अध्यक्ष भे.न.पा.१३	९८६०१९८६४	
२	धनी वीर	भे.न.पा.१३		
(३)	हर्के सुनार	"	९८६८६४२४५५	हर्के सुनार
(४)	रोशन कुमार बटाला		९८४०५४००५८	
(५)	नर बहादुर बटनेत		९८४३०५४८४२	
६	गोविन्द प्र. पौडेल		९८६८३६३०६३	
७	कर्ण ब. रोकाय		९८४८३७९५३१	
८	लिला राज के.सी		९८६८०८४८४	
९	बौसिला नेपाली वडा सदस्य		९८४८९४२२४२	
१०	सुर्य ब. रोकाय का सदस्य		९८४८४०८४८२	
११	प्र.वि.वि. तर्फ कि.इ.		९८४२८०९४०४६	
१२	दिपेन्द्र राज गिरी		९८४८०३०५०२	
१३	शेर बहादुर बटनेत		९८४४३६४९०९	
१४	नरबहादुर बटाला		९८४८०८३०८५	
१५	प्रताप रोकाय		९८६२०१९१५१	
१६	प्रिति क बटनेत		९८४९२३८१५।	
१७	पवन खिडट	वडा. चौ.नं.३	नगरप्रहरी	
१८	जगदिश राम विश्वकर्मा		वातावरण विद	
१९	नवीन गुरुङ		"	
२०	दिपेश आचार्य		समाजशास्त्री	
२१.	हेरम्ब अधिकारी			



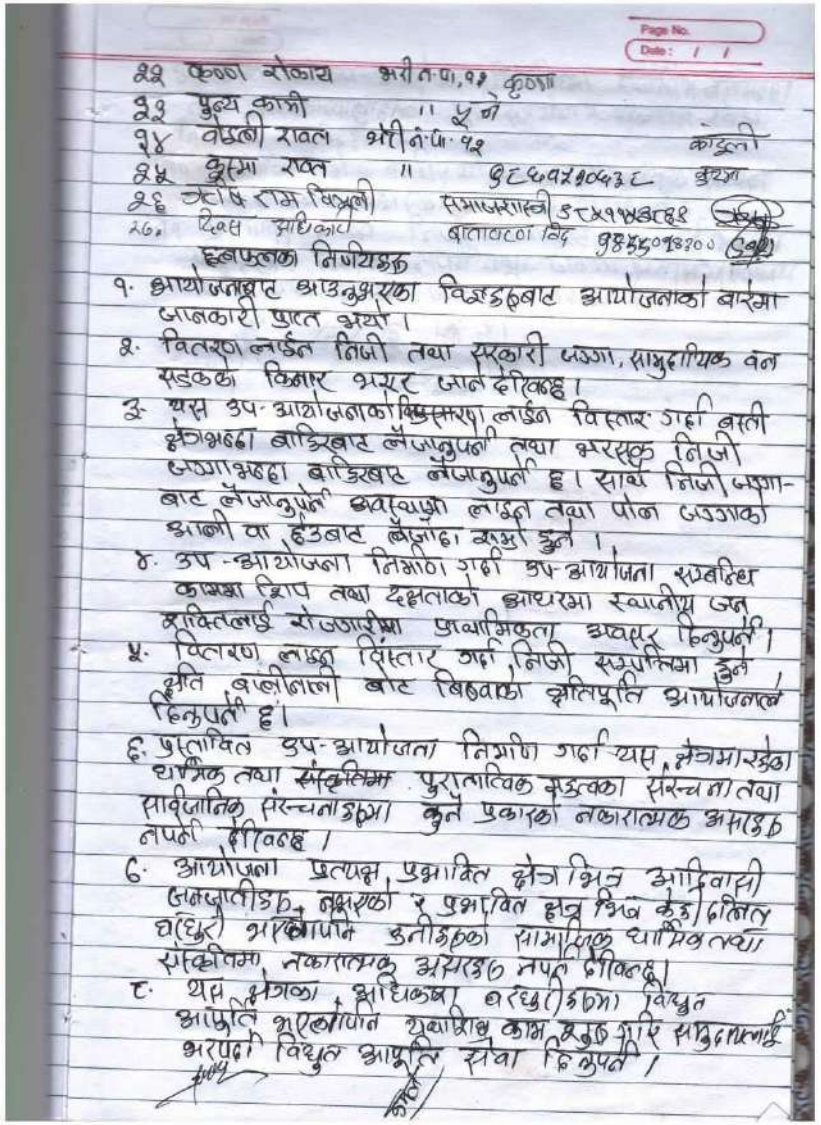
हलफलका निर्णयहरु

१. आयोजनाबारे आउन भएका विज्ञहरुबाट आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. वितरण लाईन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार भएर जान सकिनेछ।
३. यस उप-आयोजनाको वितरण लाईन किनार पर्ने बस्ती क्षेत्रमध्ये बाडिखाट, नेजानुपर्ने तथा आंशिक निजी जग्गामध्ये बाडिखाट नेजानुपर्ने छ। साथै निजी जग्गाबाट नेजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको आलीवा हेडबाट नेजाने राखिनेछ।
४. उप-आयोजना निर्माण पर्दा उप-आयोजना सम्बन्धि कामका क्रिया तथा दक्षताको आधारमा स्थानीय जनशक्ति-लाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।
५. वितरण लाईन विस्तार पर्दा निजी सम्पत्तिमा पर्ने क्षति बालीनाली बोटविरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने छ।
६. प्रस्तावित उप-आयोजना निर्माण पर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुनै प्रकारको नकारात्मक असर-पर्न नदिने छ।
७. आयोजना प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी जनजातिको नाम एकै जानकारी गराईएको।
८. यस क्षेत्रमा विद्युत आपूर्तिमा समस्या भएकोले उप-आयोजना अत्यावश्यक हो सिंचाईले पनि टेवा पुग्ने हुनेछ।
९. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय सहयोग तथा सरोकारवालाहरुको पूर्ण सहयोग र समन्वय रहने जानकारी गराईएको।
१०. प्रस्तावित क्षेत्र बस्ती, सांस्कृतिक सम्पदा संरचना स्थान नाम्को जानकारी गराईएको।



आज मिति २०७८।१०।१५ गतेका दिन जाजरकोट जिल्ला भेरी नगरपालिका वडा नं १२, चाँदिडाँडामा नेपाल विद्युत, प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुन गईरहेको कुडु-सामेला विद्युत वितरण लाईन उप आयोजना (वितरण लाईन, सब स्टेशन निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक आर्थिक तथा सांस्कृतिक वातावरणमा पार्न सक्ने प्रभाव बारेको हलफ्लक भेरी नं.पा वडा नं १२ का अध्यक्ष श्री मीन बडाइ कनारी ज्यूको अध्यक्षतामा काम्नीमिन्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपाध्वत विद्युतिकृ सङ्गभागिताम्रा हेरुय बमोजिमको हलफल निर्णय गरिको हो।

क्र.नं.	नाम	हैसियत	फोन नम्बर	हस्ताक्षर
१.	मीन बडाइ (अनारी)	वडाध्यक्ष, भेरी नपा, १२	९८४२४४४११०	
२.	कौशिला गढ्धेवा	"		कौशिला
३.	मनबडाइ गाईन	"		मान बं.
४.	मोतिकला रावत	"	९८४८६८०४३२	मोतिकला
५.	सविला वि.क. गढ्धेवा	"	९८४२८०१९४३	सविला
६.	प्रतिभा-चन्द्र रावत	"	९८१०३६०१४५	प्रतिभा
७.	रेखिना रावत	"	९८४६५८४४८६	रेखिना
८.	कल्पना गढ्धेवा	"		कल्पना
९.	कमला गढ्धेवा	"		
१०.	निशा रावत	"	९८०३४६५४२६	निशा
११	सागर गढ्धेवा	"	९८१५४४०८४५	सागर
१२	कुडु बडाइ वि.क.	"		कुडु
१३	सामेला गढ्धेवा	"		सामेला
१४	कमला वि.क.	"	९८४८१९३६५९	कमला
१५	विम बडाइ, और	"		
१६	अन्तिला बोर	"		अन्तिला
१७	दिपा जोशर	"		दिपा
१८	सुरिला वि.क.	"		
१९	सोनिया आरसी (बुढा ठुल मान्छे)	"	९८४२५६२९८	
२०	पुजा वि.क.	"	९८४८१९२९४१	पुजा
२१	देवी रावत	"		देवी



२२ कल्पना रोकाय भेरी न.पा, १२ कुडा
२३ पुष्प काम्नी " ५ नं
२४ वसन्ती रावत भेरी नं.पा. १२ कोडुली
२५ कुमा रावत " ९८६५२१०५३८ कुडा
२६ जगदीश राम विश्वकर्मा समाजसेवी ९८४१४४८६६१
२७ विशेष अधिकारी वातावरण विद् ९८४५०१४३०७

हलफलका निर्णयहरु

१. आयोजनाबारे आउनुअघिका विज्ञहरुबाट आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. वितरण लाईन निजी तथा सरकारी जग्गा, सामुदायिक वन सडकको किनार भएर जाने देखिन्छ।
३. यस उप-आयोजनाको विद्युतीकरण लाईन विस्तार गर्दा बस्ती हुँदाभरका बाडिरहर नेजानुपर्ने तथा बरस्क निजी जग्गाभरका बाडिरहर नेजानुपर्ने हुन। सार्वजनिक जग्गा-बाट नेजानुपर्ने अवस्थामा लाईन तथा पोल जग्गाको आली वा हेउबाट बेजाँदा राम्रो हुने।
४. उप-आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धित कामका किसिम तथा दक्षताको आधारमा स्थानीय जन शक्तिलाई रोजगारीमा प्राथमिकता अवश्य दिनुपर्ने।
५. वितरण लाईन विस्तार गर्दा, निजी सम्पत्तिमा हुने क्षति बापतको बाली तथा बिरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने हुन।
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा ~~सांस्कृतिक~~ पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनालाई कुनै प्रकारको नकारात्मक असर नपर्ने देखिन्छ।
७. आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजातीहरु, महिला र प्रभावित क्षेत्र भित्र रहेका लक्षित वर्गहरु अवस्थापन हुनेहरुका सामाजिक धार्मिक तथा सांस्कृतिक, नकारात्मक असर नपर्ने देखिन्छ।
८. यस क्षेत्रका अधिकांश वर्गहरुका विद्युत आपूर्ति अवस्थापन भएपछि काम हुन्छ गरि सम्पदानाई अपर्दा विद्युत आपूर्ति सेवा दिनुपर्ने।

Annex 6: DEED OF ENQUIRY (MUCHULKAS)

भेरी नगरपालिका

नगर कार्यपालिकाको कार्यालय

खलंगा, जाजरकोट

कर्णाली प्रदेश, नेपाल

फोन: ०८९४३०००२

ईमेल: bherimun@gmail.com

वेवसाईट: bherimun.gov.np

प.सं. : २०७८/०७९

च.नं. :१३९८

मिति: २०७८।१०।२५

विषय : जानकारी सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण,
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना ,
दरबारमार्ग, काठमाण्डौ।

प्रस्तुत विषयमा तहाँ कार्यालयको प.सं. ०७८/०७९, च.नं. १३८ मिति २०७८।१०।०७ गतेको प्राप्त पत्र अनुसार नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समाधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराईन्छ।

दल बहादुर घर्ती
नि. प्रमुख प्रशासकीय अधिकृत

भेरी नगरपालिका
२ नं. वडा कार्यालय
बाहुनथाना,जाजरकोट
कर्णालीप्रदेश, नेपाल

प.स.२०७८/०७९
च.नं. ९०२६ मिति २०७८/१०/२५

विषयः–सूचना टाँस गरिएको सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरबारमार्ग,काठमाण्डौ ।

प्रस्तुत विषय सम्बन्धमा तंहा स्थित कार्यालयको मिति २०७८।१०।०६ को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं.२. मा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको वातावरणिय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना यस कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं. २ मा अवस्थित यस २ नं वडा कार्यालयको सुचना पाटिमा २०७८।१०।२५ गते सुचना टाँस गरिएको व्यहोरा अनुरोध छ ।

काली बहादुर वली
वडा अध्यक्ष

भेरी नगरपालिका

२ नं. वडा कार्यालय

बाहुनथाना, जाजरकोट

कर्णालीप्रदेश, नेपाल

प.स.२०७८/०७९

च.नं. १०२६ मिति २०७८/१०/२६

विषयः–आयोजनाले आदिवासी जनजातिलाई असर गर्ने नगर्ने सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरबारमार्ग,काठमाण्डौ ।

प्रस्तुत विषय सम्बन्धमा एसियन इनफास्ट्रकचर इनवेस्टमेन्ट बैंक(ए.आई.आई.बि.) ऋण सहयोगमा नेपाल विद्युत प्राधिकरण,वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणली स्तरोन्नती तथा विस्तार आयोजना प्रस्तावक रहि कार्यन्वयन गर्न लागेको कुदु समैला विद्युत वितरण लाईन आयोजना अर्न्तगत नेपाल सरकारको पूर्ण विद्युतीकरण गर्ने लक्ष्य बमोजिम यहाँ नगरपालिकाको भेरी नगरपालिका वडा नं.२ हुदै वितरण लाइन जाने बस्तीहरुमा प्रत्यक्ष प्रभावित क्षेत्रभित्र आदिवासी जनजाति नभएको तर नजिकको बस्तीहरुमा आदिवासी जनजातीहरु भएता पनि स्थानीय आदिवासी जनजातीहरुको परम्परागत रहनसहन धर्म भाषा संस्कृती आदिमा कुनै नकारात्मक असर नपर्ने व्यहोरा जानकारी गराइन्छ ।

काली बहादुर बली
वडा अध्यक्ष

भेरी नगरपालिका

२ नं. वडा कार्यालय

बाहुनथोक्ला,जाजरकोट

कर्णालीप्रदेश, नेपाल

प.स.२०७८/०७९

च.नं. १०२८ मिति २०७८/१०/२६

विषय:–जानकारी सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरबारमार्ग,काठमाण्डौ ।

प्रस्तुत बिषय सम्बन्धमा तंहा स्थित कार्यालयको च.नं.१३८ मिति २०७८।१०।०७ को प्राप्त पत्र अनुसार नेपाल विद्युत प्राधिकरण द्धारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समाधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराइन्छ ।

काली बहादुर वली
वडा अध्यक्ष

भेरी नगरपालिका
३ नं वडा कार्यालय,
थाप्लेचौर जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र सं :- २०७८/०७९
चलानी नं. २९६

मिति :२०७८/१०/१९

विषय : सुचना टाँस गरिएको सम्वन्धमा ।

श्री नेपाल विधुत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरवारमार्ग, काठमाण्डौ ।

प्रस्तुत विषयमा, त्यहाँ स्थित कार्यालयको मिति २०७८/१०/०७ को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं. ३ मा नेपाल विधुत प्राधिकरण द्धारा प्रस्तावित वितरण प्रणाली स्तसोन्नती तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदन तयारी सम्वन्धी सार्वजनिक सुचना यस कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं. ३ मा अवस्थित यस ३ नं. वडा कार्यालयको सुचना पाटिमा २०७८/१०/१८ गते सुचना टाँस गरिएको व्यहोरा जानकारी गराईन्छ ।

जिल्ला बहादुर शाही
वडा अध्यक्ष

भेरी नगरपालिका
३ नं वडा कार्यालय,
थाप्लेचौर जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र सं :- २०७८/०७९
चलानी नं. 396

मिति :२०७८/१०/१९

विषय : जानकारी सम्वन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरवारमार्ग, काठमाण्डौ ।

प्रस्तुत विषयमा, त्यहाँ स्थित कार्यालयको मिति २०७८/१०/०७ को प्राप्त पत्र अनुसार नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराइन्छ ।

☎ फोन नं. ०८९-४३०३६५

भेरी नगरपालिका

४ नं वडा कार्यालय

गैरीखाली, जाजरकोट

कर्णाली प्रदेश, नेपाल

प.सं. ०७८।०७९ मितिः- २०७८।१०।१८

च.नं. :- ६३८

विषयः- आयोजनाले आदिवासी/जनजातिलाई असर गर्ने/नगर्ने सम्वन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरवारमार्ग, काठमाण्डौं ।

प्रस्तुत विषयमा एसियन इन्फास्ट्रक्चर इन्भेष्टमेन्ट वैंक (ए.आई.आई.वि.) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना प्रस्तावक रहि कार्यान्वयन गर्न लागेको कुदु, समाईला विद्युत वितरण लाईन आयोजना अन्तर्गत नेपाल सरकारको पूर्ण विद्युतीकरण गर्ने लक्ष्य वमोजिम भेरी नगरपालिकाको ४ नं. वडा हुँदै वितरण लाईन जाने वस्तीहरुमा आदिवासी तथा जनजातिहरु भएता पनि आयोजना कार्यान्वयन गर्दा उनीहरुको परम्परागत रहन सहन धर्म, भाषा, संस्कृति आदिमा कुनै नकारात्मक असर नपर्ने व्यहोरा जानकारी गराईन्छ ।

०८/१०/१८

हरि जंग शाह

वडा अध्यक्ष

☎ फोन नं. ०८९-४३०३६५

भेरी नगरपालिका

४ नं वडा कार्यालय

गैरीखाली, जाजरकोट

कर्णाली प्रदेश, नेपाल

प.सं. ०७८।०७९ मितिः- २०७८।१०।१८

च.नं. :-६८०

विषयः- जानकारी सम्वन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग, काठमाण्डौं ।

प्रस्तुत विषयमा ताँहास्थित कार्यालयको च.नं. १३८, मिति २०७८।१०।०७ को प्राप्त पत्रानुसार नेपाल प्राधिकरणद्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समाधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराईन्छ ।

वडा अध्यक्ष

भेरी नगरपालिका
५ नं. वडा कार्यालय

काफलचौर, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र सं :-०७८/०७९ मिति २०७८/१०/१६

चलानी नं.९६१

विषय : समन्वय गरिदिने सम्वन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग , काठमाण्डौं ।

प्रस्तुत विषयमा एसियन इन्फ्रास्ट्रकचर इन्भेष्टमेन्ट बैंक (एस.आई.आइ.वि) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण , वितरण तथा ग्राहक सेवा निर्देशनालय , वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना अर्न्तगत **कुदु समैला विद्युत वितरण लाईन** आयोजनाको वातावरणीय तथा सामाजिक योजनाको प्रतिवेदन तयारीको छलफलमा यस वडा भित्र निर्माण हुने लाईन तथा पोल पर्ने जग्गा धनिहरु अनुपस्थित भएमा यस वडा कार्यालयले समन्वय गर्ने व्यहोरा जानकारी गराईन्छ ।

श्यामलाल जैसी
वडा अध्यक्ष

भेरी नगरपालिका
५ नं. वडा कार्यालय

काफलचौर, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र सं :-०७८/०७९ मिति २०७८/१०/१६

चलानी नं.१६३

विषय : सुचना टाँस गरिएको सम्बन्धमा ।

श्री **नेपाल विद्युत प्राधिकरण**
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग , काठमाण्डौं ।

उपरोक्त सम्बन्धमा तहाँ स्थित कार्यालयको मिति २०७८।१०।०६ को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं ५ मा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सुचना यस कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं ५ मा अवस्थित यस ५ नं वडा कार्यालयको सुचना पाटिमा २०७८।१०।१४ गते टाँस गरिएको व्यहोरा जानकारी गराईन्छ ।

श्यामलाल जैसी
श्यामलाल जैसी
वडा अध्यक्ष

भेरी नगरपालिका
११ नं.वडा कार्यालय
जगतिपुर, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या :- ०७८/०७९ मिति :२०७८/१०/१६
च.नं :-४९०

श्री, नेपाल विद्युत प्राधिकरण
नेपाल विद्युत प्रणाली स्तरोन्नती तथा विस्तारआयोजना
दरबारमार्ग, काठमाडौं ।

विषय :- जानकारी सम्बन्धमा ।

प्रस्तुत विषयमा, तहाँ स्थित कार्यालयको च.न. १३८ मिति २०७८/१०/०७ को प्राप्त पत्र अनुसार नेपाल विद्युत प्राधिकरण द्धारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समाधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराईन्छ ।

भेरी नगरपालिका
११ नं.वडा कार्यालय
जगतिपुर, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या :- ०७८/०७९ मिति :२०७८/१०/१६

च.नं :-२६१

श्री, नेपाल विद्युत प्राधिकरण
नेपाल विद्युत प्रणाली स्तरोन्नती तथा विस्तारआयोजना
दरबारमार्ग, काठमाडौं ।

विषय :- आयोजनाले आदिवासी - जनजातिलाई असर गर्ने नगर्ने सम्बन्धमा ।

प्रस्तुत विषयमा, यशियन इनप्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बि) को ऋण- सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रहि कार्यान्वयन गर्न लागेको कुदु समैला विद्युत वितरण लाईन आयोजना अन्तर्गत नेपाल सरकारको पूर्ण विद्युतिकरण गर्ने लक्ष्य बमोजिम यहाँ नगरपालिकाको भेरी ११ नं. वडा हुँदै वितरण लाईन जाने बस्तिहरुमा आदिबासि जनजातिहरु नभएको तथा दलित जातिहरुको बसोबास रहेकोमा उक्त आयोजनाबाट दलितहरुको परम्परागत रहनसहन धर्म भाषा संस्कृति आदिमा कनै नकारात्मक असर नपर्ने व्यहोरा जानकारी गराईन्छ ।

वडा अध्यक्ष

भेरी नगरपालिका
११ नं.वडा कार्यालय
जगतिपुर, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या :- ०७८/०७९ मिति :२०७८/१०/१६
च.नं :-५८५

श्री, नेपाल विद्युत प्राधिकरण
नेपाल विद्युत प्रणाली स्तरोन्नती तथा विस्तारआयोजना
दरबारमार्ग, काठमाडौं ।

विषय :- समन्वय गरिदिने सम्बन्धमा ।

प्रस्तुत विषयमा, यशियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बि) को ऋण- सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना अन्तर्गत कुदु समैला विद्युत वितरण लाईन आयोजनाको वातावरणिय तथा सामाजिक योजनाको प्रतिवेदन तयारीको छलफलमा यस वडा भित्र निर्माण हुने लाईन तथा पोल पर्ने जग्गा धनिहरु अनुपस्थित भएमा यस वडा कार्यालयले समन्वय गर्ने व्यहोरा जानकारी गराईन्छ ।

वडा अध्यक्ष

भेरी नगरपालिका
११ नं.वडा कार्यालय
जगतिपुर, जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या :- ०७८/०७९ मिति :२०७८/१०/१६

च.नं :-५४१

श्री, नेपाल विद्युत प्राधिकरण
नेपाल विद्युत प्रणाली स्तरोन्नती तथा विस्तारआयोजना
दरबारमार्ग, काठमाडौं ।

विषय :- सूचना टाँस गरिएको सम्बन्धमा ।

प्रस्तुत विषयमा, तहाँ स्थित कार्यालयको मिति २०७८/१०/०६ को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं. ११ मा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको बातावरणिय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं. ११ मा अवस्थित यस ११ नं. वडा कार्यालयको सूचना पाटिमा २०७८/१०/१६ गते टाँस गरिएको व्यहोरा जानकारी गराईन्छ ।

वडा अध्यक्ष

भेरी नगरपालिका
१२ नं. वडा कार्यालय
थर्पुडाडाँ ,जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या. ०७८/०७९
चलानी नं. ४८८

मिति :२०७८/१०/१४

श्री :नेपाल विद्युत प्राधिकरण नेपाल वितरण
प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग, काठमाण्डौ ।

विषय :सुचना टाँस गरिएको सम्बन्धमा ।

उपरोक्त सम्बन्धमा त्यहा स्थित कार्यालयको मिती २०७८।१०।०६ को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला भेरीनगरपालिका वडा नं. १२ मा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको बातावरणीय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदनतयारी सम्बन्धि सार्वजनिक सुचना यस कर्णाली प्रदेश जाजरकोट जिल्ला भेरीनगरपालिका वडा नं १२ मा अवस्थित यस १२ नं वडा कार्यालयको सुचना पाटिमा २०७८।१०।१४ गते टाँस गरिएको व्यहोरा जानकारी गराईन्छ ।

निम बहादुर भनारी
वडा अध्यक्ष

भेरी नगरपालिका
१२ नं. वडा कार्यालय
थर्पुडाडाँ ,जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या. ०७८/०७९
चलानी नं. ४८०

मिति :२०७८/१०/१४

श्री :नेपाल विद्युत प्राधिकरण नेपाल वितरण
प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग, काठमाण्डौ ।

विषय :समन्वय गरिदिने सम्बन्धमा।

उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बि) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण,वितरण तथा ग्राहक सेवा निर्देशनालय ,वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना अर्न्तगत कुदु समैला विद्युत वितरण लाईन आयोजनाको वातावरणिय तथा सामाजिक योजनाको प्रतिवेदन तयारीको छलफलमा यस वडा भित्र निमार्ण हुने लाईन तथा पोल पर्ने जग्गा धनिहरु अनुपस्थित भएमा यस वडा कार्यालयले समन्वय गर्ने व्यहोरा जानकारी गराईन्छ ।

निम बहादुर भनारी
वडा अध्यक्ष

भेरी नगरपालिका
१२ नं. वडा कार्यालय
थर्पुडाडाँ ,जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या: ०७८/०७९
चलानी नं. ४६९

मिति :२०७८/१०/१४

श्री :नेपाल विद्युत प्राधिकरण नेपाल वितरण
प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग, काठमाण्डौ ।

विषय :जानकारी सम्बन्धमा ।

उपरोक्त सम्बन्धमा त्यहा स्थित कार्यालयको चं नं १३८ मिती २०७८।१०।०७ को प्राप्त पत्र अनुसार नेपाल विधुत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराईन्छ ।

निम बहादुर भनारी
वडा अध्यक्ष

भेरी नगरपालिका
१२ नं. वडा कार्यालय
थर्पुडाँ ,जाजरकोट
कर्णाली प्रदेश, नेपाल

पत्र संख्या. ०७८/०७९
चलानी नं. ४६६

मिती :२०७८/१०/१४

श्री :नेपाल विद्युत प्राधिकरण नेपाल वितरण
प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग, काठमाण्डौ ।

विषय :आयोजनाले आदिवासी _ जनजातिलाई
असर गर्ने। नगर्ने सम्बन्धमा।

उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बि) को ऋण_सहयोगमा नेपाल विद्युत प्राधिकरण,वितरण तथा ग्राहक सेवा निर्देशनालय ,वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रहि कार्यन्वयन गर्न लागेको कुदु समैला विधुत वितरण लाईन आयोजना अर्न्तगत नेपाल सरकारको पुर्ण विद्युतीकरण गर्ने लक्ष्य बमोजिम यहाँ नगरपालिकाको भेरी १२ वडा नं हुदै वितरण लाईन जाने बस्तिहरुमा आदिबासि जनजातिहरु नभएको तथा दलित जातिहरुको बसोबास रहेकोमा उक्त आयोजनाबाट दलितहरुको परम्परागत रहनसहन धर्म भाषा संस्कृति आदिमा कुनै नकरात्मक असर नपर्ने व्यहोरा जानकारी गराईन्छ ।

निर्म बहादुर भनारी
वडा अध्यक्ष

भेरी नगरपालिका
१३ नं. वडा कार्यालय

कुदु, जाजरकोट
कर्णाली प्रदेश, नेपाल

प्र. सं २०७८/०७९
चलानी नं. 7029

मिती २०७८/१०/१७

विषय: आयोजनाले आदिवासी -जनजातिलाई असर गर्ने नगर्ने सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरबारमार्ग, काठमाण्डौ

उपरोक्त विषयमा एसियन इन्फास्ट्रकचर इन्भेष्टमेट बैंक (ए.आई.आई.बि)को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना प्रस्तावक रहि कार्यन्वयन गर्न लागेको कुदु समैला विधुत वितरण लाईन आयोजना अर्न्तगत नेपाल सरकारको पुर्ण विद्युतीकरण गर्ने लक्ष्य बमोजिम यहाँ नगरपालिकाको भेरी १३ नं. वडां.हुदै वितरण लाईन जाने बस्तिहरुमा आदिवासी जनजातिहरु नभएको तथा दलित जातिहरुको बसोवास रहेकोमा उक्त आयोजनाबाट दलितहरुको परम्परागत रहनसहन धर्म भाषा संस्कृति आदिमा कुनै नकरात्मक असर नपर्ने व्यहोरा जानकारी गराईन्छ।

गोपाल बहादुर बटाला
वडा अध्यक्ष

भेरी नगरपालिका
१३ नं. वडा कार्यालय
कुदु, जाजरकोट
कर्णाली प्रदेश, नेपाल

प्र. सं २०७८/०७९
चलानी नं. १०२९

मिती २०७८/१०/१७

विषयः सुचना टाँस गरिएको सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरबारमार्ग, काठमाण्डौ

उपरोक्त सम्बन्धमा तहाँ स्थित कार्यालयको मिति २०७८।१०।१६को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं.१३ मा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सुचना यस कर्णाली प्रदेश जाजरकोट जिल्ला भेरी नगरपालिका वडा नं.१३ मा अवस्थित यस १३ नं.वडा कार्यालयको सुचना पाटिमा २०७८।१०।१६ गते सुचना टाँस गरिएको व्यहोरा जानकारी गराईन्छ ।

गोपाल बहादुर बटाला
बडा अध्यक्ष

भेरी नगरपालिका
१३ नं. वडा कार्यालय

कुदु, जाजरकोट
कर्णाली प्रदेश, नेपाल

प्र. सं २०७८/०७९
चलानी नं. 9080

मिती २०७८/१०/१७

विषयः जानकारी सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवारमार्ग, काठमाण्डौ

उपरोक्त सम्बन्धमा तहाँ स्थित कार्यालयको च.न.१३८ मिति २०७८।१०।०७ को प्राप्त पत्र अनुसार नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित विवरण प्रणाली स्तरोन्नती तथा विस्तार आयोजनाको गुनासो समधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराइन्छ ।

गोपाल बहादुर बटाला
वडा अध्यक्ष

भेरी नगरपालिका
१३ नं. वडा कार्यालय

कुडु, जाजरकोट
कर्णाली प्रदेश, नेपाल

प्र. सं २०७८/०७९
चलानी नं. 1082.

मिती २०७८/१०/१७

विषय: समन्वय गरिदिने सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरबारमार्ग, काठमाण्डौ

प्रस्तुत विषयमा एसियन इन्फास्ट्रकचर इन्भेष्टमेट बैंक (ए.आई.आई.वि) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना अन्तर्गत कुडु समैला विद्युत वितरण लाईन आयोजनामो वातावरणीय तथा सामाजिक योजनाको प्रतिबेदन तयारीको छलफलमा यस वडा भित्र निमार्ण हुने लाइन तथा पोल पर्ने उनुपस्थित जग्गा धनिहरु संग यस वडा कार्यालयले समन्वय गर्ने व्यहोरा जानकारी गराइन्छ ।

गोपाल बहादुर बटाला
वडा अध्यक्ष

कुशे गा.पा.लिका
५ नं वडा कार्यालय
गोराहचौर जाजरकोट
कर्णली प्रदेश नेपाल

पत्र संख्या: २०७८/०७९
चलानी नम्बर : ३८२ मितिः२०७८/१०/२४

श्री नेपाल विधुत प्राधिकरण
नेपाल बितरण प्रणली स्तरोन्नति तथा बिस्तार आयोजना
दरबार मार्ग काठमाण्डौ

विषय : सिफारिस गरिएको सम्वन्धमा ।

उपरोक्त सम्वन्धमा ताहाँ स्थित कार्यालयको मितिः२०७८/१०/२३ को प्राप्त पत्र अनुसार कर्णाली प्रदेश जाजरकोट जिल्ला कुशे गा पा वडा नं ५ मा नेपाल बिधुत प्राधिकरण द्वारा प्रस्तावित बितरण प्रणली स्तरउन्नति तथा बिस्तार आयोजना वातावरणिय तथ सामाजिक व्यावस्थापन योजना प्रतिवेदन तयारी सम्वन्धि सार्वजानिक सुचना यस कर्णाली प्रदेश जाजरकोट जिल्ला कुशे गा पा वडा नं ५ अवस्थित यस ५ नम्वर वडा कार्यालयको सुचना पाटीमा मितिः२०७८/१०/२४ गते सुचना टाँस गरिएको व्याहोरा जानकारी गराइन्छ

ऐन बहादुर सिंह
वडा सचिव
श्री ऐन बहादुर सिंह
वडा सचिव

कुशे गाउँपालिका
५ नं. वडा कार्यालय
गोराहीघर, जाजरकोट
कर्णाली प्रदेश, नेपाल
२०७२

पत्र संख्या :- ०७८।०७९
चलानी नं.

श्री नेपाल बिधुत प्राधिकरण
नेपाल बितरण प्रणाली स्त रोन्नती तथा बिस्तार आयोजना

दरबारमार्ग काठमाडौं

मिति-२०७८/१०/२४

बिषय- समन्वय गरीदिने सम्बन्ध मा /

प्रस्तुत बिषयमा एसियन इन्फास्टकर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बि.)को ऋण सहयोगमा नेपाल बिधुत प्राधिकरण बितरण तथा ग्राहक निर्देशनालय,बितरण प्रणाली स्तरोन्नति तथा बिस्तार आयोजना अन्तर्गत कुदु समैला बिधुत बितरण लाईन आयोजना को वातावरणीय तथा सामाजिक योजना प्रतिबेदन तयारी छलफल मा यस वडा भित्र निर्माण हुने तथा पोल पर्ने अनुपस्थित जग्गा धनिहरु संग यस वडा कार्यालय ले समन्वय गर्ने व्यहोरा जानकारी गराईन्छ /

ऐनु बहादुर सिंह
वडा सचिव

श्री ऐन बहादुर सिंह
वडा सचिब

कुशे गाउँपालिका
५ नं वडा कार्यालय
गोराहँचौर जाजरकोट
कर्णली प्रदेश नेपाल

पत्र संख्या: २०७८/०७९
चलानी नम्बर :८२९

मिति:२०७८/१०/२४

श्री नेपाल बिद्युत प्राधिकरण
नेपाल बितरण प्रणली स्तरोन्नति तथा बिस्तार आयोजना
दरवार मार्ग काठमाण्डौ

विषय : जानकारी सम्वन्धमा ।

उपरोक्त सम्वन्धमा ताहाँ स्थित कायालयको च नं १३८ मिति २०७८/१०/०७ को प्राप्त पत्र नेपाल बिद्युत प्राधिकरण द्वारा प्रस्तावित बितरण प्रणाली स्तरउन्नति तथा बिस्तार आयोजनाका गुनासो समाधान संयन्त्र गठन भएको व्यावरा प्राप्त भएको जानकारी गराइन्छ ।

ऐन बहादुर सिंह

श्री ऐन बहादुर सिंह
वडा सचिव

कुशे गाउँपालिका
५ नं वडा कार्यालय
गोराहेघार जाजरकोट
कर्णली प्रदेश नेपाल

पत्र संख्या: २०७८/०७९
चलानी नम्बर : ३८३

मिति:२०७८/१०/२४

श्री नेपाल बिद्युत प्राधिकरण
नेपाल बितरण प्रणली स्तरोन्नति तथा बिस्तार आयोजना
दरबार मार्ग काठमाण्डौ

विषय : आयोजना आदिवासि जनजाति असर गर्ने नगर्ने सम्वधमा ।

उपरोक्त विषयमा एसियन इन्फास्ट्रक इन्भेष्मेट बैक ए आई आई वि को ऋण सहायोगमा नेपाल विद्युत प्राधिकरण ,वितरण तथा ग्राहाक सेवा निर्देशनालय वितरण प्रणाली स्तरउन्नति तथ वितरण आयोजना प्रस्तावक रहि कार्यन्वयण गर्न लागेको हुदा कुदु समाइला वितरण लाइन आयोजना अन्तर्गत नेपाल सरकारको पुर्ण विद्युतिकरण गर्न लक्ष्य बमोजिम यहाँ गाँउपालिकाको कुशे ५ नं वडा हुदै वितरण लाइन जाने बस्तिहरुमा आदिवासी जनजातिहरु नभएको तथा दलित जातिहरुको बसोबास रहेकोमा उक्त आयोजना वाट दलितहरुको परम्परागत रहनसहन धर्मा भाषा संस्कृति आदिमा कुनै नकारात्मक असर नपर्ने व्याहोरा जानकारी गराइन्छ

श्री ऐनै बहादुर सिंह
वडा सचिव

बितरण प्रणाली स्तरउन्नति तथा बिस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, कुडो गापा/नपा ५ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस कर्णाली जाजरकोट जिल्ला कुडो गाउँ/नगर पालिका वार्ड नं ५, रुपी मा आज २०७८.१२०.१२३ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	हरी बं सिंह		कृषि	९८६८०४०१७	
२	जय बं बिक		,,	९८६९२९८१९९	
३	शिवशेर बस्नात		जारी-च डेलो	९८६०४९५२८.	
४	गहिरा बि क				
५	अर्जुन बं गापा	कुडो रुपी	कृषि	९८४०९९७०९०	
६	डिलली बं सिंह			९८६०४०४९२६	
७	मान बं सिं (सपुर्ब)			९८६३३७८००	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, डाइरकोट जिल्ला, पेरी गापा/नपा २ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस डाइरकोट जिल्ला पेरी गाउँ/नगर पालिका वार्ड नं २, साउलबाला मा आज २०७८/१०/१५ गते हामी तपसिलका व्यक्तिहरुको रोहबरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	भिम बहादुर कार्की	भे.न.पा.१	व्यापार	९८४८४६९१९६	
१.	ललित बहादुर रोकाया	भे.न.पा.१	कृषि	९८१४८८८०२१	
२.	कृष्णबहादुर चन्द	"	व्यापार	९८४८०४६१११	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, भेरी गापा/नपा ९ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला भेरी गाउँ/नगर पालिका वार्ड नं ९, चोरपटा मा आज २०७८/१२/१९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	रतन पुन	भेरी नं.पा.९ जेमवा	कृषि	९८४४९९६०	
२.	कर्ण बहादुर पुन	"	"	९८६८०१४४४	
३.	हिमाल पुन	"	"	९८४४८८६०६६	
४.	दही पुन	"	"	९८४१४६९००	
५.	सरस्वती	"	"	सरस्वती	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, सालझण्डी जिल्ला, कुर्झे गापा/नपा ४ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस सालझण्डी जिल्ला कुर्झे गाउँ/नगर पालिका वार्ड नं ४, पैंचकटिया मा आज २०७८.१२.१५ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१)	पूर्ण बहादुर खत्री	पैंचकटिया, कुर्झे ४	व्यवसायी	९७४८१०६५५८	पूर्ण खत्री
२)	सदिराम खत्री	कुर्झे ४ पाचनाटीया		९८६८१४६६६	
३)	[illegible]	" "		९७४८०४४३२	
४)	दल बहादुर शाही	" "		९८४८१५५५९९	
५)	पुर्ण बहादुर खत्री	कुर्झे ४ पाचनाटीया			
६)	[illegible]	" "		९८६६२१९९९८	
७	विश्वब भोगाय	[illegible]		९८६०२८३९१८	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, कुडरी गापा/नपा २ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तरउन्नति तथा बिस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला कुडरी गाउँ/नगर पालिका वार्ड नं २, दमदला मा आज २०७८.१.१०.१४.४ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	भक्त बहादुर शाही	कुडरी-२, दमदला	समाजसेवी	९८४८२२३२४४	
२	प्रेम केसी	,,	किसान	९८६२९४४८२८	
३	शिव बहादुर मल्ल	,,	शिक्षक	९८४४५५८०९	
४	गणेश खत्री	,,	कृषि	९८४२२९८०९५	
५	मोतीराम नेपाली	९७४५५३८६१८			
६	मायाराम नेपाली	९७४९९६२४५५			
६	प्रेम बहादुर नेपाली	९८४९७१८९३१			
८					

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, डोल्पा जिल्ला, कुडो गापा/नपा ०५ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस डोल्पा जिल्ला कुडो गाउँ/नगर पालिका वार्ड नं ५, हिमे बजारमा मा आज २०७८।१०।१३ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	प्रेम बहादुर शाही	कुडो-५ हिमे			
२.	राम बहादुर जहट	कुडो ५, हिमे		9862149162	
३.	मोतिलाल बहादुर छि. शी	कुडो ५, हिमे		9848299318	
४.	हर बहादुर मल्ल	कुडो ५, हिमे		9848679292	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना टाँस को मुचुल्का**

.....कर्णाली..... प्रदेश, ...जाजरकोट..... जिल्ला, ...कुर्से..... गापा/नपा .....वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस ___जाजरकोट___ जिल्ला ___कुर्से___ गाउँ/नगर पालिका वार्ड नं ___४___, ___बहुगाउँ___ मा आज २०७८/१०/२१ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	जयकुमारी बुढा आपा	कुर्से-४, जर्दर गाउ	गृहिणी	—	
२)	लोकेन्द्र राज थापा	"	शिक्षक	9742235052 / 9744835	
३)	मनिता बुढा	कुर्से-४	विद्यार्थी	९८६६८४३५००	
४)	कृष्ण ब. सिंह	"		98664994	
५	कल्पना शाही	४-५	व्यवसायिक		

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

प्रदेश, ... जिल्ला, ... गापा/नपा ..... वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस ..... जिल्ला ..... गाउँ/नगर पालिका वार्ड नं ..... मा आज २०७८..१२/१/२१ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	इन्द्रबहादुर थापा	कुडो - ६	कृषि (स्थानीय)	९८४१७४१४१३	
२.	धृष्टिमान सिंह	"	"		
३.	दल बहादुर खत्री	"	"		
४.	बिर्ख लिम्बुवान	"	"		
५.	अनिता नेपाली	"	"	९७९७१५२९२१	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, भेरी गापा/नपा ५ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला भेरी गाउँ/नगर पालिका वार्ड नं ५, इदरगाई खोला (वाइदेला) मा आज २०७८ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	नन्धर पुत्र	जो.नं.पा-५	कृषि	9861293984	
२	तेजप्रसाद	" ११	"	9846360893	
३	सुर्ने	क्याडु	गृहणी	9868505496	
४	कृष्ण	"	" ५	9848636488	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, भेरी गापा/नपा ११ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन **तयारी सम्बन्धि** सार्वजनिक सूचना यस जाजरकोट जिल्ला भेरी गाउँ/नगर पालिका वार्ड नं ११, कुशाकोट मा आज २०७८।१०।१६ गते हामी तपसिलका व्यक्तिहरुको रोहबरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	चित्र ब. विक	भे.न.पा - ११	स्थानीय	९८६९७४२३३	
२	हिराराम उपाध्याय	" "	स्थानीय	९८४९०५३२९	
३	सुकाँरा आचार्य	" "		९८४४ ८६ ९७९८	
४	दासिल ब. आचार्य	" "		९८४२६८६६९	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना टाँस को मुचुल्का**

कर्णाली प्रदेश, जाजरकोट जिल्ला, भेरी गापा गापा/नपा ९२ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला भेरी गाउँ/नगर पालिका वार्ड नं ९२ पापुडाडा (ज.वि.) मा आज २०७८।१०।१५ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	रिकम ब. ठाकुर	भेरी न.पा.९२	कृषी	९८७४६२८९४	
२	सरी ब. रावत	"	कृषि	९८२२४६१४०९	
३	कमला वि.क.	"	कृषि	९८६८१९३६४९	
४	पुष्प कामी	"	कृषि	९८४८३८१६४६	
५					
६					
७					
८					
९					

Annex 7: SAFETY RELATED SIGNS AND WASTE MANAGEMENT PRACTICES

SIGNAL NOTICE



First Aid
प्राथमिक उपचार



Emergency Meeting Point
आकस्मिक भेला हुने ठाउँ



Fire Extinguisher
अग्नी नियन्त्रण उपकरण



Fire hose
अग्नी नियन्त्रण पाइप

DANGER SIGNS



Keep Out
निर्माण क्षेत्र- टाढै रहनुहोस्



Danger
खतरा - खुल्ला खाल्डो



Danger of open trench
खतरा - खुल्ला ट्रेन्च



No operation without safety guards
सुरक्षाका साधनविना यो उपकरण संचालन गर्न निषेध

INSTRUCTION SIGNS







Slow Sign for Traffic Control
ट्रयाफिक रोक्नुहोस्



Directional Exit Sign
बाहिर जाने दिशा

SAFETY AND SAFETY INSTRUCTION SIGNS



Safety Gloves Required
सेफ्टी पन्जाको आवश्यक



Safety Vests Required
सेफ्टी भेस्टको आवश्यक



Safety Glasses Required
सेफ्टी चश्मा आवश्यक



Safety Shoes Required
सेफ्टी जुता आवश्यक

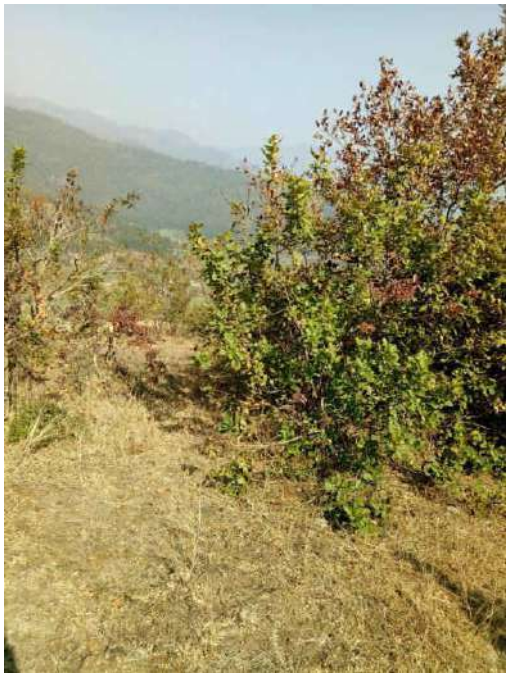

निर्माणस्थलमा गर्नहुने र नहुने कुराहरु


निर्माणस्थलमा गर्नहुने र नहुने कुराहरु

Annex 8: PHOTOGRAPHS



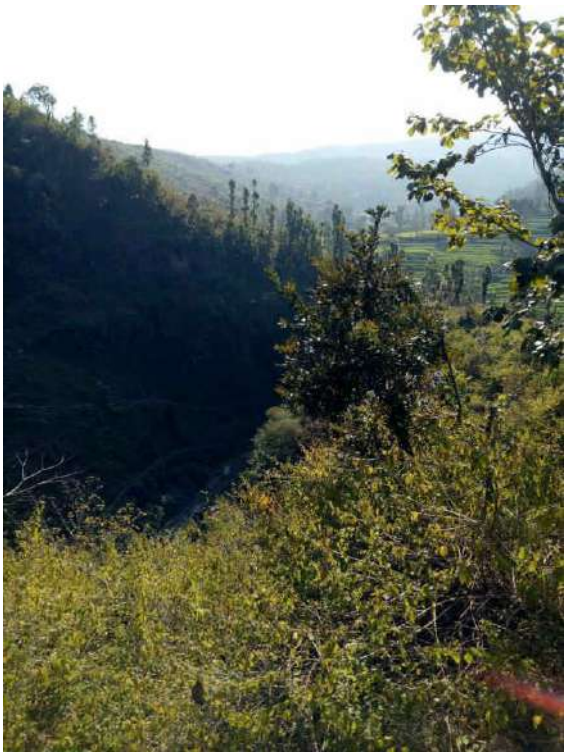
Tapping point (Kudu substation)



Line alignment in Timure Dada Community Forest and sampling site



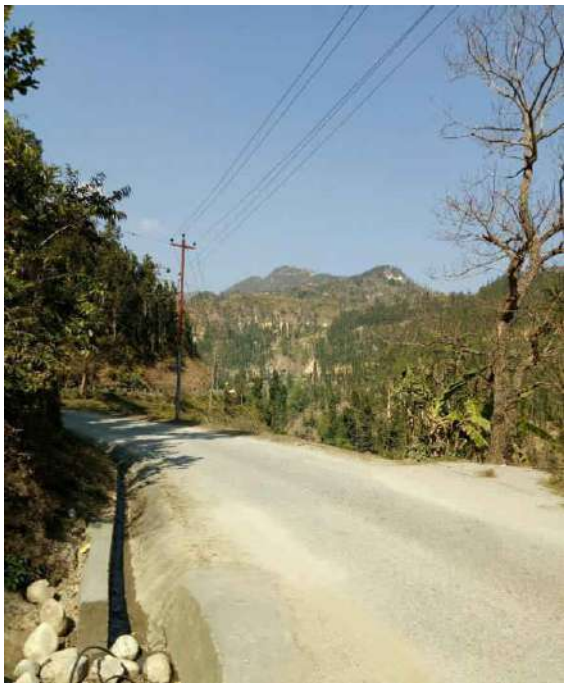
Stream crossing near Khurpa, Kushe Rural Municipality, Ward No. 05



stream crossing about 150 m with the ridge



Proposed distribution line alignment in Jagatipur Community Forest near Ebargad Khola



Distribution line allignment along with composite with existing 11 kV line



Landslide in proposed distribution line alignment near khalanga



Public consultation at Thinkethala, Kushe Rural Municipality, Ward No. 7



Consultation with Local Bodies with Public at Kudu, Bheri Municipality, Ward No. 13

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

ATHBISKOT-VAMPUCHAUR DISTRIBUTION LINE SUBPROJECT

SUBSTATION (33/11 KV) AND DISTRIBUTION LINE (33 KV)

JAJARKOT DISTRICT, KARNALI PROVINCE

NEPAL ELECTRICITY AUTHORITY

DISTRIBUTION AND CONSUMER SERVICE DIRECTORATE

DISTRIBUTION SYSTEM UPGRADE AND EXPANSION PROJECT (DSUEP)

DURBARG MARG KATHMANDU NEPAL

CONSULTANT:

NEA ENGINEERING COMPANY LIMITED, TRADE TOWER

THAPATHALI, KATHMANDU, NEPAL

JUNE 2022

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ABBREVIATIONS

ACSR	Aluminum Conductor Steel Reinforced
AIIB	Asian Infrastructure and Investment Bank
BES	Brief Environment Study
COVID-19	Corona Virus Disease
CDP	Community Development Program
CPA	Core Project Area
DCSD	Distribution and Consumer Services Directorate
DHM	Department of Hydrology and Meteorology
DL	Distribution Line
DSUEP	Distribution System Upgrade and Expansion Project
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Regulation
EMF	Electromagnetic Field
ESP	Environmental and Social Policy
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ESSs	Environmental and Social Standards
GHG	Green House Gas
GIS	Geographic Information System
GoN	Government of Nepal
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
IP	Indigenous People
IUCN	International Union for Conservation of Nature
IUSGS	International Union of Geological Sciences
LPG	Liquid Petroleum Gas
MDB	Multilateral Development Bank
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MHT	Main Himalayan Thrust

NEA	Nepal Electricity Authority
PPE	Personal protective equipment
RM	Rural Municipality
RoW	Right of Way
SPA	Surrounding Project Area
SPM	Suspended Particulate Matter
SWM	Solid Waste Management
US EPA	United States, Environment Protection Agency
USGS	United States Geological Survey
VC	vulnerable community

Unit

%	Percent/ Percentage
CO_2	Carbon dioxide
dB	Decibel
g	Gram
ha	Hectare
HHs	Households
Kg	Kilogram
Km	Kilometer
kV	Kilovolt
kWh	Kilo Watt Hour
ltr	Liter
LV	Low Voltage
m	Meter
masl	Meter Above Sea Level
mm	Millimeter
MVA	Mega Volt Ampere
MW	Megawatt
NRs.	Nepalese Rupees
^oC	Degree Centigrade
sq.m.	Square Meter

EXECUTIVE SUMMARY

Description of Project: Nepal Electricity Authority (NEA) under Ministry of Energy, Water Resources and Irrigation is responsible for the implementation of the Distribution System Upgrade and Expansion Project (DSUEP). DSUEP will enhance the distribution system to improve reliability and quality of electric supply in the Karnali province and Lumbini province. The proposed **Athbiskot–Vampuchaur Distribution Line Subproject** is located within Ward No. 7 of Bafikot Rural Municipality, Ward No. 10, 9 and 7 of Aathbiskot Municipality of Rukum West district and Ward No. 8, 9 and 10 of Tribeni Nalagad Municipality of Jajarkot District in Karnali Province. The Subproject requires 0.76 ha of land (Government Land) for the construction of substation. The 33 kV distribution line of 25.1 km passes through the right of way of the road and private land with installation of poles at the edge of the farm land. The proposed subproject is financed with loan by Asian Infrastructure Investment Bank (AIIB).

Description of Environment

Physical Environment: The Subproject (substation and distribution line) area lies in Mid-Hill region of the Lesser Himalayan zone. The substation lies at Latitude 28°43'45.32"N, Longitude 82°26'14.78"E and elevation of 2317 masl. The climate of the Subproject area is sub-tropical. The average temperature at the project area varied from 8.0°C to 34.0°C. The average annual rainfall is estimated at approximately 1,868.5 mm per year. The air quality of the Subproject area is within the range of national ambient air quality standard while noise was found above noise quality standard because of the vehicular noise nearby the settlement area. There are no any water sources recorded distribution line (33kV) and nearby the substation area.

Biological Environment: The proposed Subproject (substation and distribution line alignment) distribution line passes from the edge of Koti Simla Community Forest, Kalika Community Forest lies in Rukum West while tapping from. Also, line passes from Salleri Community Forest, and Vampopatal Community Forest while tapping from Danipipal. The Subproject does not lie in any protected areas. The vegetation species recorded during the screening field visit are: Khashru (*Quercus semecarpifolia*), Chir pine (*Pinus roxburghii*), Banmara (*Ageratina adenophora*), Chutro (*Berberis aristata*), Utis (*Alnus nepalensis*), Rhododendron (*Rhododendron arboretum*), Banj (*Quercus leucotrichophora*), Kaphal (*Myrica esculenta*) and Buki phool (*Anaphalis contorta*). Similarly, wild animal recorded during the public consultation are: Marsh Rabbit (*Sylvilagus palustris*), Jackel (*Canis aureus*), and Malayan Porcupine (*Hystrix brachyuran*). Altogether six species of birds were noted around the surrounding project area; House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* and Jureli *(Hypsipetes leucocephalus).*

The proposed 33 kV distribution line passes through the 8 different community forests. A total of 3.81 ha of the forest area will be occupied by RoW of proposed 33 kV distribution line. An estimation of 856 number of trees to be cleared from the RoW of the proposed distribution line from 8 community forests.

Socio-Economic Environment: The major ethnic compositions within the surrounding project area i.e., Ward No. 7 of Bafikot Rural Municipality, Ward No. 10, 9 and 7 of

Aathbiskot Municipality and Ward No. 8, 9 and 10 of Tribeni Nalagad Municipality are Chhetri (46.3%), Dalit (29.0%), Thakuri (15.2%), and Magar (6.1%) of total population of 16,184. The implementation of the Subproject will increase the electricity beneficiaries to 3,428 HHs, 30 commercial purposes and 10 industries. Chaurjhari, Musikot and Khalanga are the nearest business markets nearby the Subproject. The transportation facilities in this local level seems to be satisfactory. Tap/piped water is the main source of drinking water in the surrounding Subproject area. People of the Subproject have access with communication facilities mainly through mobile telephone services. The nearest and easily accessible health facility nearby the proposed Subproject's substation area is Mangma Health Post (Bafhikot Municipality, Ward No.7) with a travel distance of 1.5 km from the site. The main occupation of people in the area is agro base with nearly 65% contribution followed by small trade and business/enterprises and services.

Potential Impacts and Mitigation Measures: Civil works will be involved with temporary impacts on air, noise and water quality and occupational and community health and safety; particularly related to working with electricity and in the context of the COVID-19 pandemic. Long-term impacts, although insubstantial, during operation and maintenance include occupational and community health and safety risks related to the presence of electricity infrastructure. The potential environmental issues and mitigation measures identified in screening and the preparation of ESMP report will be addressed during the compliance monitoring carried out by the safeguard team. The land requirements for the substation and the pole erection there will be no any issues. Since the proposed substation land is private land and for the distribution line people have suggested to install poles at the edge of farm-lands, without affecting any private structures along the distribution line. The implementation of the proposed Subproject needs 3.81 ha of forest area with estimated loss of 856 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. The compensatory plantation will be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019) in the ration of 1:10. The ESMP cost estimated for the Subproject is NRs 13,00,000.00 associated to mitigation measures and monitoring activities. NEA Project Implementation Unit has agreed on the estimated cost for the mitigation measures and monitoring activities.

Environmental and Social Management Plan: The ESMP serves as a guide to implement environmental and social mitigation measures and responsibility of the concerned agencies during the construction and operations of the Subprojects. Monitoring and inspection of the environmental and social activities will be carried out by Environment and Social Management Unit and Project Supervision Consultant of PIU. ESMP will be an integral part of the contractor's Bidding document which will be updated by the contactor during the sub-project construction period.

Institutional Arrangements: To ensure the full compliance to the ESMP, institutional arrangement for monitoring and reporting has been proposed. All the resources needed for the implementation of ESMP for the construction and operation phase will be provided by the PIU. Project Supervision Consultant's with Environmental and Social Safeguard Specialist will be responsible for compliance monitoring activities during the construction phase. Environment and Social Management Unit of NEA will provide regular updates to the site offices regarding the implementation of ESMP. Contractor shall prepare an Environment,

Health and Safety (EHS) plan approved by the PIU before field mobilization. Contractor should mobilize a safety officer at each work site during the construction period.

Public consultation: Public consultations have been conducted in the Subproject area. People in the Subproject area noted that electricity service is poor with frequent interruptions. People have suggested to install poles at the edge of farm-lands, and project components should not affect any house and structures along the line. The impacts on the crops while stringing of lines should be minimized. Prospective electricity consumers and people to be affected are supportive and have recommended for quick implementation of the project.

Grievance Redress Mechanism (GRM): A three-tier Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental issues at Subproject level. In each Subproject, two levels i.e., Tier-I and Tier-II of Grievance Redress Mechanism have been established. During the ESMP study period, NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the Subproject level.

Conclusion: The environmental impacts envisaged from the implementation of proposed Subproject are site specific, short term, temporary and reversible in nature. The Subproject will provide significant benefits to people and economy by providing the reliable and improve electricity supply. The implementation of the proposed Subproject needs 3.81 ha of forest area with estimated loss of 856 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. This ESMP is considered sufficient to mitigate the environmental and social issues identified for the Subproject and will be updated during the Subproject construction stage.

1. INTRODUCTION

1.1 Project Background

The proposed Distribution System Upgrade and Expansion Project (DSUEP) will enhance the distribution system to improve reliability and quality of electric supply in the Karnali province. The project aims improvement in voltage level and reduction in power loss which in turn will improve Nepal Electricity Authority's (NEA) financial health, improve electricity supply reliability, and reduce dependence on petroleum-fueled accessories. Government of Nepal (GoN) has envisaged DSUEP to extend the reach of 33 kV and 11 kV distribution lines "to achieve affordable electricity fulfilling the demands at the local levels for all the households by 2022". Asian Infrastructure Investment Bank (AIIB) is financing a loan to upgrade existing and build new distribution systems in Lumbini Province and Karnali Province of Nepal. This ESMP is prepared for Athbiskot–Vampuchaur distribution line Subproject of DSUEP.

This Subproject has three major components:

Component 1: construction, extension and augmentation of distribution lines and substations, especially 33 kV lines and 33/11 kV substations.

Component 2: construction of 11 kV lines, distribution transformers, and Low Voltage (LV) lines for new power distribution facilities.

Component 3: Capacity Building, Project Implementation Support, and Technical Assistance.

1.2 Scope of Study

This study ensures that the project meets the requirements of Nepal Government's Environmental Regulations and Environmental and Social Policy (ESP) & Environmental and Social Standards (ESSs) of AIIB. This report provides the measures for environmental and social management, monitoring and reporting of the project.

1.3 Objective of ESMP

The Environment and Social Management Plan aims to sets out the measures required to maximize the benefits of the project; and to avoid, minimize and mitigate any adverse environmental and social impacts caused by the project. The objectives of this ESMP are to:

- Describe the existing natural and socio-economical resources in and surrounding Subproject area;
- Based on existing environmental conditions, identify and assess potential significant impacts during project preconstruction, construction, and operation & maintenance stages;
- Identify and recommend mitigation measures to minimize any potential impacts caused by Subproject activities;
- Identify the local concerns on environmental and social issues and address them;
- Develop environmental management plan and monitoring plan including cost;

- Recommend institutional arrangement, including capacity building to ensure proper environmental and social safeguards implementation during construction and operation phases.

1.4 Legal Provision

According to the E & S safeguard Screening report, safeguard risks/issues identified for this Subproject fall under Category III (ESMF), which triggers the preparation of ESMP to execute the Subproject. This Subproject has minimal or no adverse environmental and social impact; does not physically displace any family; and does not result in economic displacement of more than 10% of productive assets for any family.

Pertaining to Rule 3 (1), Environment Protection Act (EPA), 2019 describes completing Environmental Studies as per Schedule 1 or 2 or 3 under Environment Protection Regulation (EPR) 2020 (First Amendment in 2021/05/24 on Nepal Gazette), detailed environmental studies Brief Environmental Study (BES) or Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) is required. For this Subproject, pertaining to Rule 3(1), EPA (2019) describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1) under EPR (2020) state “use of forest area for the electricity distribution line project up to 66 KV”. The proposed Subproject will intercept the Koti Simla Community Forest (CF), Kalika CF lies in Rukum West while tapping from. Also, line passes from Salleri CF, and Vampopatal CF land area for the purpose of 33 kV distribution line extension and substation construction. Thus, as per EPR (2020), a BES is mandatory for the proposed sub project.

1.5 Methodology for the ESMP

The methodology that was followed while conducting the ESMP study is as follows:

i. Literature Review: Review of published literature were conducted, with priority given to publications of government institutions as well as international organizations, to collect information on project surroundings. The Municipality/Rural Municipality and its Ward profiles are used to collect the socio-economic baseline information of the Subproject. National policies, legislative frameworks and Multilateral Development Bank (MDB) policies were reviewed to understand the priorities and any legally binding requirements were studied that should be complied with while implementing the project. The Legislative provisions relevant to the project are listed in **Annex 4**.

ii. Field Survey and Investigation: Field surveys were conducted to generate information on the physical, biological and socio-economic environment of the project area. The physical environment; air quality data was monitored by Temtop Airing-1000 PM Detector, noise level by UNI-T UT 353 Mini Sound Meter (dB) and water quality by EXTECH ExStik II DO600. Field observation of the core project area and the surrounding vicinity (500m) of project footprint area was applicable for the biological assessment. A circular quadrate of radius 12.5m was used for the estimation of the number of trees presence within the RoW of the proposed distribution line. A total of 8 different sample quadrate were used and trees numbers were estimated by extrapolation within RoW. The total enumeration of the trees to be cleared for the

implementation of the sub project will be estimated during the BES study. The tree clearance approval is made once the Brief Environment Study (BES) is approved from the Ministry of Energy, Water Resources and Irrigation. Priority was given to the consultation with local communities at substation sites and the settlement areas that benefit from the project. Pertaining to Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019), BES report will be prepared. NEA/PIU must take approval from Government of Nepal, for the use of forest on the implementation phase. As per section 17 (3), the compensatory ratio for the loss of trees should be made in the ratio of 1:10 and require care, maintenance and upkeep of the planted trees before handover to concerned forest office after 5 years

iii. Data Analysis: All potential Subproject impacts on physical, biological, socio-economic and cultural resources were integrated and assessed using best practice of Multilateral Development Banks, as well as compliance with national requirements. The Geographic Information System and SW Maps were used for the field assessment and analysis of the CPA and SPS data and presentation of the maps in the ESMP report. The project foot print Ward and Municipality/Rural municipality are considered for the collection of socio-economic and baseline information.

iv. Impact Evaluation: Significance of impacts are evaluated on the basis of reversibility, nature, magnitude, extent and duration of the impact. Identification of magnitude, extent and duration is as provided in the National EIA Guidelines, 1993 of Nepal. While evaluating the impacts and prescribing mitigation, maximum efforts were made to get expert opinion and input from the DSUEP's technical and safeguard consultant team.

v. Public Consultation: As per the Government of Nepal EPA and the AIIB Environmental and Social Policy (ESP), pre-notifications with subject of consultation, venue, and time were given at Subproject foot-print area, local level and affected Ward office in presence of concerned local stakeholders. Consultations were conducted in the Subproject area, at substations and the distribution line system settlement areas with local stakeholders.

vi. Report Format: The ESMP report is prepared as per the Environmental and Social Policy (ESP) of the AIIB, which contains an executive summary, a main report, and annexes as appropriate, including one on the nature and findings of consultations undertaken. All the comments and suggestions from the field consultation are mentioned in the ESMP report.

1.6 Classification of Impact Area

The National EIA Guidelines (GoN, 2050) has mentioned on the "Core Project Area", and "Surrounding Project Area" based on proximity and magnitude of the impacts due to construction and operation of the proposed project.

Core Project Area (CPA) refers to the temporary and permanent area for the proposed project construction and associated activities. It is area where direct impacts can be seen.

For **Athbiskot–Vampuchaur Distribution Line Subproject**, proposed substation area with 0.76 ha and the 33 kV distribution line with 25.1 km length is considered as CPA. The Subproject components are located within the Ward No. 7 of Bafikot RM, Ward No. 10, 9 and 7 of Aathbiskot Municipality. The major settlements in the subproject area are Radijiula, and Chaukha. The distribution line stringing route passes along the right of way of the road alignment (2+400-2+800, 11+350-12+300, 15+000-16+650, 20+800-20+900, 20+950-22+200, 22+700-22+990, 24+100-25+920), cultivated land (0+100-0+240, 0+380-0+420, 0+600-1+000, 1+300-1+260, 1+310 -1+400, 1+550-1+650, 1+700-1+900, 2+800-3+810, 4+000-4+190, 4+300-5+040, 6+025-6+060, 7+250-7+850, 8+100-9+045, 9+180-9+023, 9+280-10+820, 11+200-11+250, 12+780-13+200, 13+420-14+850, 18+130-18+150, 18+800-19+200, 19+285-19+420, 20+700-20+900, 22+200-22+270, 22+390-23+200 and 24+000-24+1000), along the barren land (0+240-0+380, 0+420-0+600, 1+000-1+200, 1+260-1+310, 1+400-1+550, 1+650-1+700, 3+910-4+000, 9+230-9+280, 10+820-11+000, 13+200-13+420, 22+500-22+600, and along the edge of forest (11+400-12+200, 12+400-12+650, 14+200-15+600, 16+000-16+600, 17+500-18+800, 21+400-21+600, 22+800-23+000, 23+000-24+600 and 25+920).

Surrounding Project Area (SPA) is the immediate vicinity of the footprint location of the proposed Subproject site. SPA is the moderate and indirect impact area. For this Subproject the 33 kV distribution line will be located within the Ward No. 7 of Bafikot RM, Ward No. 10, 9 and 7 of Aathbiskot Municipality of Rukum West district and Ward No. 8, 9 and 10 of Tribeni Nalagad Municipality of Jajarkot district and along with these Wards, the adjoining Wards; Ward No. 3, 5 and 9 of Aathbiskot Municipality and Ward No.6 of Bafikot RM is considered as SPA. The impact area showing the CPA and SPA area is presented in the google map **Figure 1-1**..

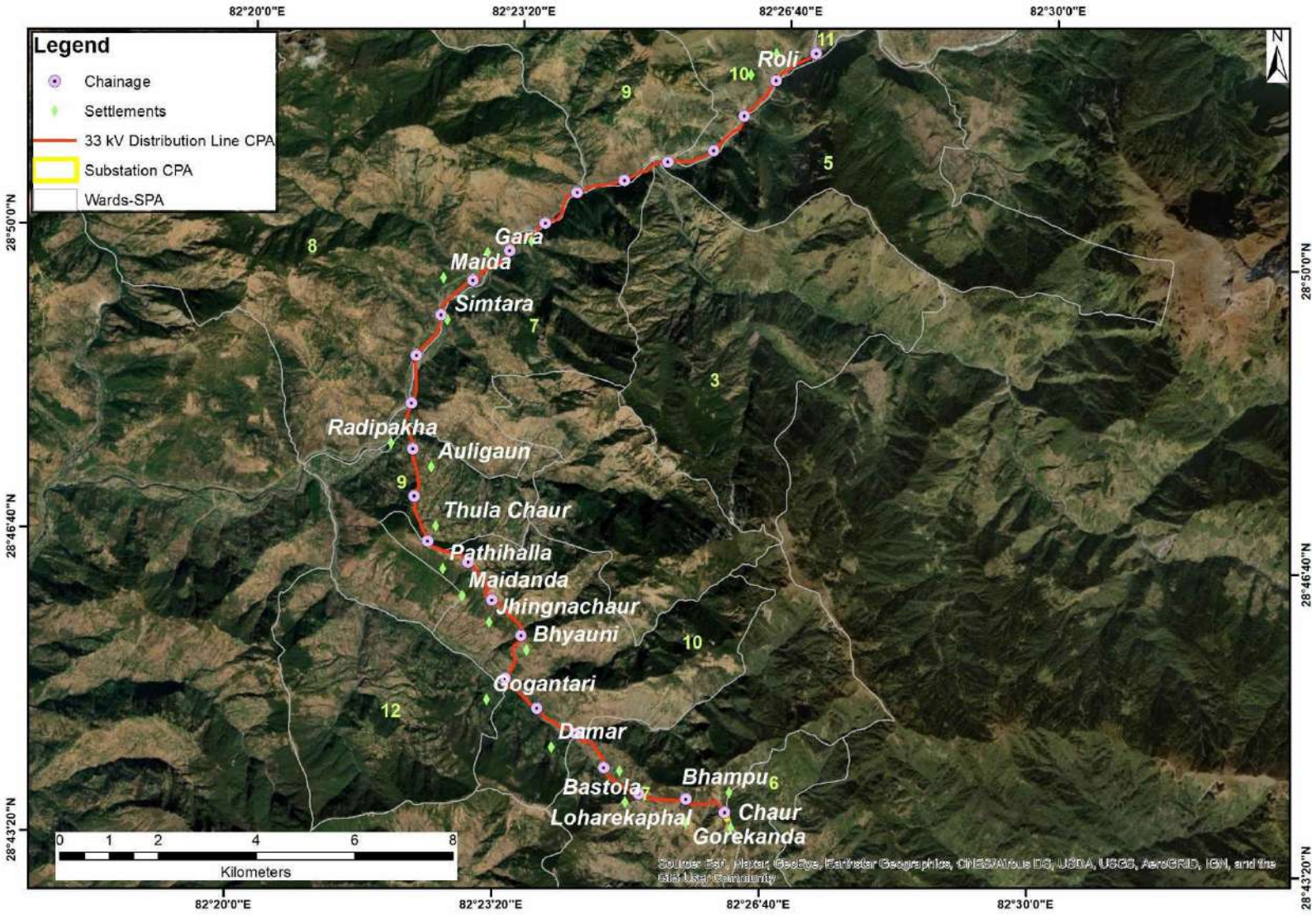


Figure 1-1: Core Project Area (CPA) and the Surrounding Project Area (SPA) Wards of the Athbiskot–Vampuchaur DL Subproject

2. DESCRIPTION OF THE SUBPROJECT

2.1 Subproject Location and Accessibility

The proposed **Athbiskot–Vampuchaur Distribution Line Subproject** is located within Banphikot Rural Municipality, Ward No. 7, Aathbiskot Municipality, Ward No.10, 9, and 7 of Rukum West and Tribeni Nalagad Municipality, Ward No. 8, 9 and 10 of Jajarkot district in Karnali Province. The tapping point of Subproject lies in Chaukha Substation, Tribeni Nalgad Ward No.11, Jajarkot. The proposed distribution line (33 kV) is of 25.1 km length and runs by the RoW of access road. There is access to road transport within the proposed Subproject Ward area. There is the access to road transport within the proposed Subproject Ward area. The Subproject location and the accessibility map are presented in the map below **Figure 2-1**. The main features of the Subproject are presented in **Table 2-1**.

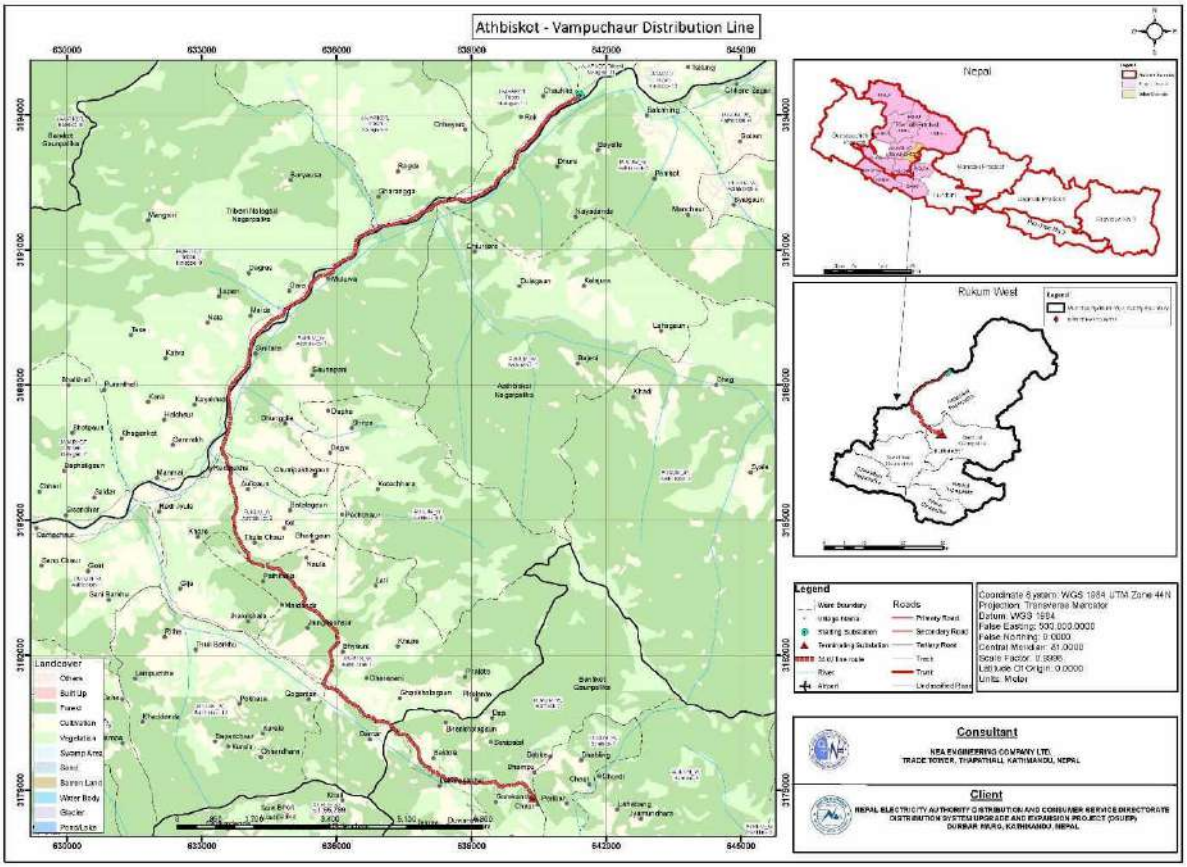


Figure 2-1: Location and Accessibility Map of Athbiskot–Vampuchaur Subproject[1]

[1] *Source: Department of Survey, 1995 and Field Study 2021*

Table 2-1: Technical Description of the proposed Subproject

Description	Features
Proponent	Nepal Electricity Authority
Project	Distribution System Upgrade and Expansion Project (DSUEP)
Subproject	**Athbiskot–Vampuchaur Distribution Line Project**
Funding Agency	AIIB
Project Location	Banphikot Rural Municipality, Ward No. 7, Aathbiskot Municipality, Ward No.10, 9, & 7 of Rukum West and Tribeni Nalagad Municipality, Ward No. 8, 9 & 10, Jajarkot district, Karnali Province.
Distribution Line	
33kV Line Starting Point	Tapped from Existing Chaukha Substation, Tribeni Nalgad-11, Jajarkot. Co-ordinate: Lat 28°52'11.47"N, Long 82°27'0.16"E
33kV Line End Point	Vampuchaur Substation (Proposed) at Banfikot-7, Vampuchaur, West Rukum Co-ordinate: Lat 28°43'45.32"N, Long 82°26'14.78"E
Land type	Government/Private
System Voltage	33 kV
Max, Min System Voltage	36, 30 kV
Climatic Condition	Wind Speed: As per IS 802-1-1 Maximum Ambient Temperature: 34 °C Altitude (Min, Max): 890, 2317 masl
Length of Line/ No. of Pole	25.1 km/628 Poles
Right of way	6 m
Number of Circuit	1
Conductor	ACSR Dog
Line Capacity/Thermal Limit (approx.)	13.4 MW at 0.9 power factor
Type	Steel Tubular Pole with 11m/13m Height
Pole Configurations	Single Pole Structures, H-Pole Structures etc. (With and without Stay Sets)
Diameter of a Single Pole (approx.)	0.22m (As per IS 2713-3)
Planting Depth of Pole	2.2m
Insulators	Porcelain Disc and Pin Insulator
Substation	
Location	Vampuchaur Substation (Proposed) at Banfikot-7, Vampuchaur, West Rukum Co-ordinate: Lat 28°43'45.32"N, Long 82°26'14.78"E Elevation: 2317 masl
Land type	Government
Voltage Level	33/11 kV
Substation Capacity	8 MVA
Number and Capacity of Transformer	1 nos., 6/8 MVA
Type of Transformer	3 Phase, ONAN, Mineral Oil
Type of Substation	AIS (33kV) and Indoor (11kV)
Number of 33kV Line Bays	1

Number of 33kV Transformer Bays	1
Number of 11kV Feeders	4
Substation Area	0.76 ha

2.2 Subproject Components

The major components of the Subproject are the 33/11 kV substation and 33 kV distribution line (DL). The 33 kV DL is tapped from an existing 33 kV network line and acts as a source feeding to the proposed 33/11 kV substation. 11 kV distribution feeders emerge from the substation, eventually supplying the electricity to the consumers. The structures of the Subprojects are briefly described here.

2.2.1 33 kV Distribution Line (DL)

The 33 kV DL serves as the pathway for feeding electricity to the proposed substation. Aluminum Conductor Steel Reinforced (ACSR) type conductors are stringed on Steel Tubular Pole from the starting point of the line. In general, the 33 kV lines comprises of the Steel Tubular Poles, Insulators, Conductors and Supporting Stays. Length of distribution line is 25.1 km and the total number of steel tubular poles to be erected are estimated as 628.

Steel Tubular Poles: Steel tubular poles will be installed in this Subproject. 11 m and 13 m long poles shall be used depending upon the location of the poles and number of circuits used in the line. The poles to be erected, will be supported by stays wherever necessary. Insulators will be installed at cross arms to support the conductor from the poles.

Insulators: The insulators provide insulation to the poles from high voltage in the conductors. Pin type insulators will be employed for suspension poles whereas disc types will be employed for tension poles. Porcelain type insulators will be used owing to its dielectric strength, better compressive strength, higher resistance to degradation, suitability for extreme climate, and environment friendly characteristics over its counterparts.

Conductor: ACSR Conductor – Aluminum Conductors Steel Reinforced, conductors with stranded layers of aluminum and steel will be used for 33 kV lines. Aluminum strands carry the current whereas the steel in between provides the mechanical strength for the conductor. Typically, 100 sq. mm conductors are used in 33 kV line for this Subproject which is also known as ACSR DOG conductor.

Stay/Guy Sets: Stay Wires are used to support or provide the balancing tension to the poles. These are made up of steel materials and can be used in multiples for a single pole, depending upon the requirements.

2.2.2 Substation

The proposed substation 33/11 kV is of capacity 6/8 MVA. The substation plays the role of lowering the 33 kV voltage level to 11 kV, which will then be stringed as distribution feeder to

supply the consumers. The major component of the substation is power transformer, which is supported by the switchgear components and Civil Structures. The facility and components sample pictures are shown in **Annex 3**.

Transformers: Transformer is the major component of the distribution substation. It transforms power from higher voltage to lower voltage for distribution purpose. Power Transformers are used for the 33/11 kV substations. These transformers are mineral oil based with ONAN/ONAF (Oil Natural Air Natural/Oil Natural Air Forced) cooling mechanisms. In existing practice, the transformers used for 33/11 kV substation in Nepal are typically of 1 MVA, 3 MVA, 8 MVA and 16 MVA depending upon the load supplied by the substation. This Subproject comprises of power transformer of 6/8 MVA ONAF type.

Electrical Switchgear: Electrical Equipment comprising of Circuit Breaker, Earth Switch, Current Transformer, Potential Transformers, etc. installed in the substation are called Electric Switchgear. They facilitate the objective of power conversion.

Civil Structures: A control building is essential for the operation of the substation. It houses the operating station, along with battery systems. Guard House and Staff Quarter are other essential buildings for smooth operation of the substation.

Switchyard, Boundary, Roads, Drainage and Essentials: The outdoor civil structure in the proposed substation includes the boundary wall, main entrance gates and Switchyard. The power transformer and components of power system are laid in the switchyard based on the prudent engineering practice. Steel structures are used to support the components as per component wise requirements. Roads are paved within the boundary as essential for the transport of power transformer and other components. The substation location also serves as site store for storage of distribution system components.

2.2.3 11 kV Lines and LT Lines

11 kV lines and LT lines take the access of electricity to the consumer households. It is why the construction of those lines are always encouraged by the local people. The line route, thus the installation of poles and lines, are envisaged to go through the edge of local roads. If any line route pass through any private lands, permission from the corresponding land owner will be taken before starting the construction of those lines start.

The detailed line route survey for 11 kV and LT lines have not been done yet. The scope of detailed survey is in the scope of the construction Contractor. The construction Contractor will conduct Pre-Construction Survey (PCS) to finalize the line route of 11 kV lines and LT lines for the construction. PCS will prepare the detailed line route of those lines and submit to PIU for approval. After the detailed line route is submitted by the Contractor and approved by PIU, E&S team of Project Supervision Consultant (PSC) will conduct an E&S study and submit the findings that

- Do the lines pose any adverse Environmental or Social issues?
- If there are any Environmental or Social issue, how can they be resolved? If the lines do not pose any adverse Environmental or Social issue, the lines will be cleared by PIU after seeking concurrence from AIIB.

- If the solution measures are not implementable in the field, PCS will suggest for any other way to divert or reroute the lines? If yes, PCS will propose alternative line route. The lines will be cleared by PIU after seeking concurrence from AIIB, given that the lines do not pose any adverse Environmental or Social issue.

2.3 Major Construction Activities in the Subproject

Activities in the Subproject area can be sub-divided into three categories viz, Pre-Construction Phase, Construction Phase and Operation Phase. For the proposed Subproject, trees and bushes in the Right of Way of 33 kV lines have to be cleared whereas, no trees within the proposed substation boundary have to cleared for the construction work. The proposed Athbiskot–Vampuchaur Line Subproject intercept forest area 3.81 ha. The estimated loss of trees species in the Right of Way of 33 kV lines are 856.

I. **Preconstruction phase**: The activities to be carried out before the construction phase are:
- Demarcation of land area for the proposed substation
- Receive public opinion
- Make clearance of the substation land area permanently
- Distribution line route selection
- Approval to cut down trees from the concerned government authorities

II. **Construction phase**: The activities to be carried out during the construction phase are:
- Assign the land area for temporary storage of construction materials
- Transportation of construction materials
- Leveling of land area for the proposed substation
- Cutting down of trees in Right of Way of 33 kV lines
- Construction of substation structures
- Pole erection work for 33 kV, 11 kV and low-tension distribution lines
- Stringing of 33 kV, 11 kV and low-tension distribution line

III. **Operation phase**: The activities to be carried out during the operation phase are:
- Maintenance of the substation and 33 kV distribution line route

2.4 Energy to be used

During the construction period diesel fuel will be used to power construction equipment and transport vehicles, which emits air pollutants and greenhouse gases in insignificant quantity. Use of firewood is restricted in the labor camp, whereas the Contractor shall supply LPG for cooking foods to the workers.

2.5 Land Required

The Athbiskot–Vampuchaur Subproject Subproject will require about 0.76 ha land for the placement of substation. The land is government land and will be managed by NEA to construct the substation in the designated area. The 33 kV distribution line of 25.1 km passes through Koti Simla Community Forest, Kalika Community Forest and Salleri Community Forest, and Vampopatal Community Forest.

2.6 Material Requirement and Sources

A 33/11 kV substation, 33 kV, 11 kV and low-tension distribution lines will be constructed for this Subproject. Minimal excavation at the pole locations will be done to erect steel tubular poles of 11 m and 13 m. The depth of burial for 11 m (approximately 256 kg) and 13 m (approximately 343 kg) poles are 1.8 m and 2.17 m respectively. The construction works for substation will not produce significant amount of spoils and thus it will not require spoil-dumping site. Similarly, excavation works carried out for digging pit holes for poles produces insignificant spoils which does not require management of earthworks.

Civil construction works will involve excavation for foundation of substation, steel reinforcement, cement, coarse aggregates and fine aggregates (sand). Materials will be procured from legally operating markets. The design team has provided the following estimate of construction materials required for 33 kV distribution line and the substation.

Table 2-2: Approximate Quantity of Material for 33 kV line

SN	Particular	Unit	Requirement
1	Amount of Steel	Ton/Km	5800
2	M15 concrete for Pole base	Cum/Km	12.5

Source: Design Report, DSUEP

Table 2-3: Approximate Quantity of Material for 33/11 kV Substation

SN	Particular	Unit	Support Structures, Road, Drainage	Control Building	Staff Quarter	Office Building	Guard House
1	M15 Concrete	cum	100	25	224	120	5
2	M25 Concrete	Cum	300	170	125	75	27
3	Reinforcement bar	Ton	7	27	20	12	4

Source: Design Report, DSUEP

2.7 Major Equipment and Power Requirements

Major equipments used during the Project implementation are:

One Excavator, One Roller, One Drilling Machine, One Crane, one Grid Supply of 100 kVA Distribution Transformer, and two 50 kVA capacity diesel generators.

2.8 Workforce Requirement

Local people in the surrounding Subproject area will be encouraged for the employment. Based on the skills (skilled, semi-skilled and unskilled labor) local people will be used for the construction and both male and female will get equal opportunity during construction. The number of human resources required depends upon the complexity of the project as well as the geographical location of the project. In case, of construction of 33 kV lines and 33/11 kV substations, the workforce typically varies from terai to hilly to mountain region. Expected number of manpower employed is enlisted hereunder.

Table 2-4: Human Resource Required for construction of 33 kV line and substation in a day of Construction

SN	Human Resource/Day	For Distribution Line	For Substation
1	Engineer (No.)	1	2
2	Supervisor (No.)	2	4
3	Foreman (No.)	3	5
4	Skilled (Lineman/Electrician) (No.)	5	7
5	Helper (No.)	3	12
6	Labour (No.)	15	20

Source: Design Report, DSUEP

2.9 Construction and Implementation Schedule

Implementation of the proposed Subproject comprises construction of a new 33/11 kV substation, 33 kV lines, 11 kV lines, low tension lines, and installation of distribution transformers. It includes construction and installation of components as mentioned in subsection 2.2. The estimated completion period is 24 Months.

Table 2-6: Construction Schedule of Project Implementation

SN	Activities/ Months	**Months** *(After the completion of Detailed Survey Study)*					
		1-3	**4-6**	**7-10**	**11-15**	**16-20**	**20-24**
1.	Invitation for tender, evaluation, and award						
2.	Implementation of Environmental and Social Safeguards						
3.	Erection of Poles						
4.	Stringing of conductor						
5.	Construction of substation						
6.	Charging and Testing						

Source: Design Report, DSUEP

3. DESCRIPTION OF THE ENVIRONMENT

3.1 Physical Environment

3.1.1 Topography and Land Use

The Subproject area lies in Ward No. 7 of Bafikot Rural Municipality, Ward No. 10, 9 and 7 of Aathbiskot Municipality of Rukum West district and Ward No. 8, 9 and 10 of Tribeni Nalagad Municipality of Jajarkot, Karnali Province. The Subproject components are located within the Hilly region of Nepal. The proposed distribution line (33 kV) of 25.1 km passes by the edge of Jajarkot–Dolpa road till the proposed substation location. The tapping point is situated at Latitude 28°52'11.47"N and Longitude 82°27'0.16"E with an elevation of 1130 masl (**Figure 3-1**). The proposed distribution line stringing route passes along the edge of Salagad Khola, Kharkhara Khola, Bheri River, Jaligad Khola, Tasu Khola, community forest, barren land and the sparse settlement area.

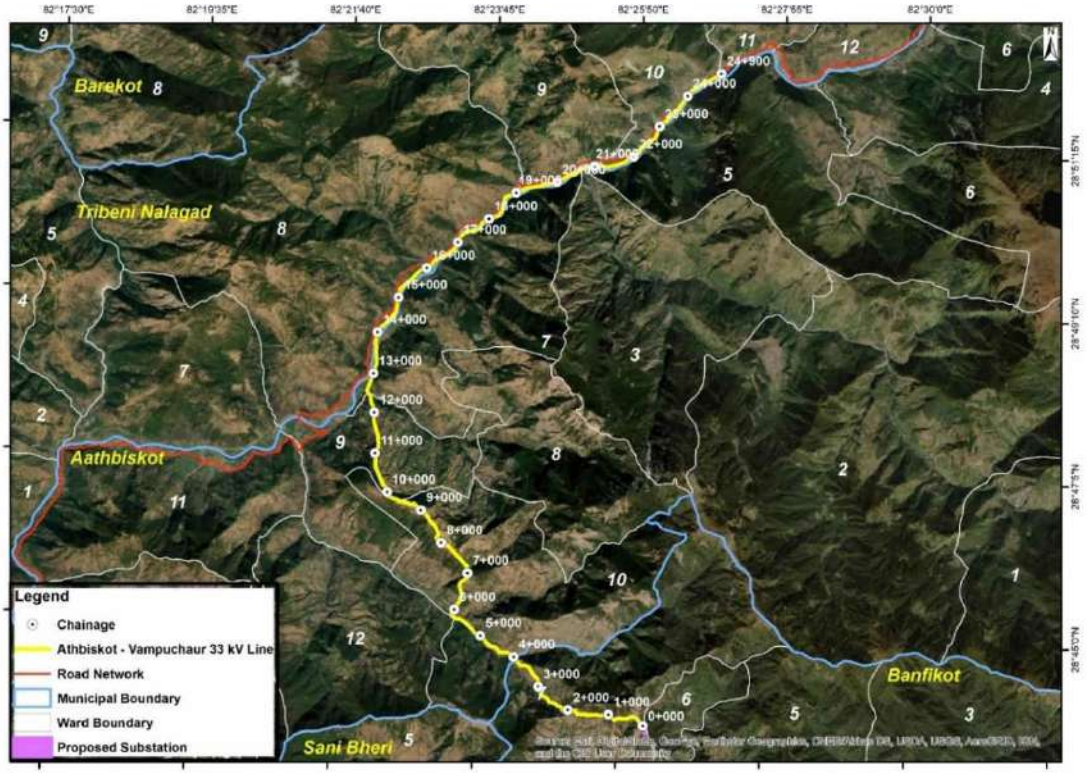


Figure 3-1: Location map and Land use details of the Subproject[2]

The substation lies at Latitude 28°43'45.32"N, Longitude 82°26'14.78"E and elevation of 2317 masl (**Figure 3-3)**. The site lies in depressed flat land. It is a barren land owned by GoN. The proposed substation boundary lies within 0.76 ha area. None of the private and public entities will be affected due to the implementation of the proposed Subproject, as it will be installed within the RoW of existing road, barren land and the edges of the cultivated land. The land use map details with the components of the Subprojects are presented in **Annex 2**.

[2] *Source: Topographic Map, Department of Survey, 1995 and Field Study 2021*



Figure 3-2: Tapping point of Subproject lies in Chaukha Substation



Figure 3-3: Land for the proposed substation at Vampuchaur, West Rukum

3.1.2 Geology

Geologically, the proposed Subproject lies on Dali Formation composed of white to grey colored quartzite with intercalations of thin layers of slate and black phyllite. The rock consists of purple phyllite with quartz vein and purple quartzite. The line passes through silty clay soil cultivation land at the Khagenkot, Auligau, and Koth village. The line runs between Bhayauni and Maidaha village, passing through community forest and cultivation ground of cohesive soil. The line passes from the roadside alignment where there is silty clay of cohesive soil.

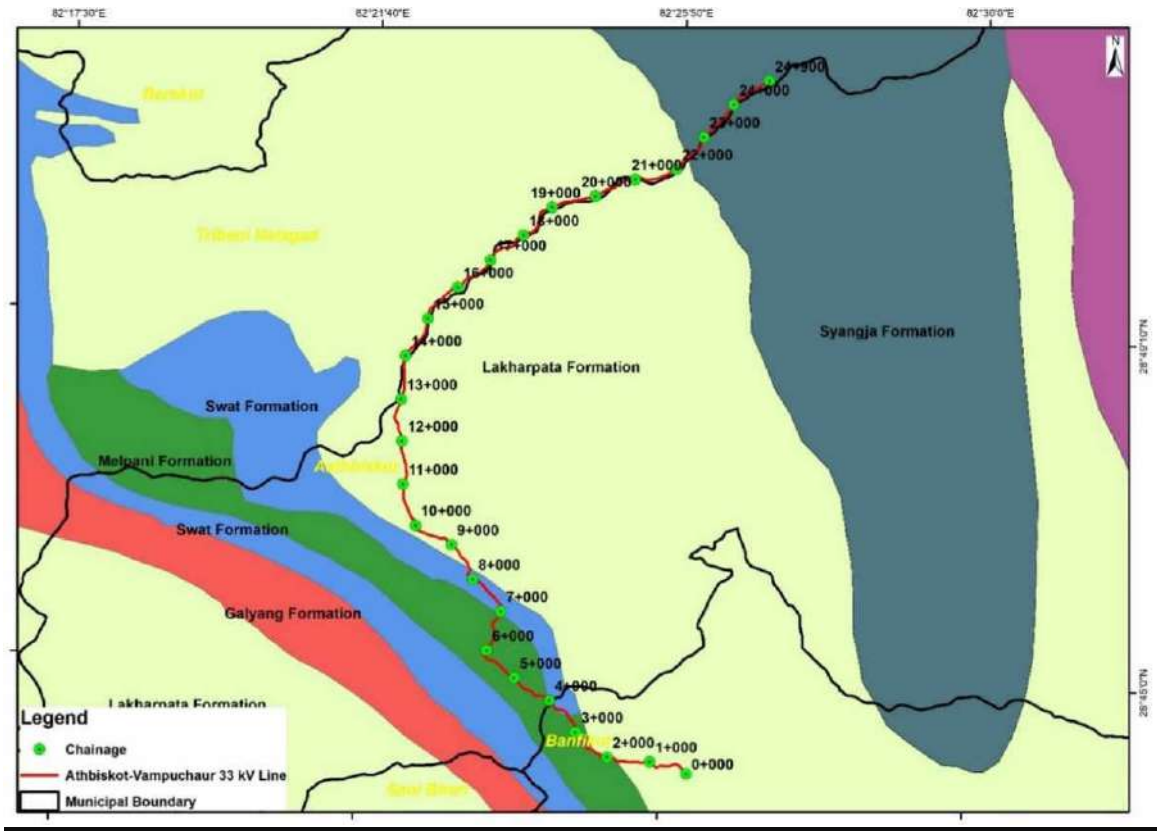


Figure 3-4: Geological Map of proposed Subproject Area[3]

3.1.3 Seismology

The entire country of Nepal is in a seismically active zone caused by subduction of Indian tectonic plate under the Tibetan Plate. According to National Seismological Center of Nepal several big earthquakes have been felt in Nepal, the earthquakes of magnitude 6 to 7 are mostly confined to the Main Himalayan Thrust (MHT) between the foot hills and the Higher Himalaya. Moreover, earthquake generation is confined to the crustal depth of 20 km. However, shallow earthquakes at depths down to 6 km are generated as a result of strike slip faults. Therefore, the substations and distribution lines of this Subproject will be designed and operated in accordance with seismic design requirements and best engineering practice. The seismic activity in Nepal between 1964 and 2019 as in IUSGS portal is shown in **Figure 3-5.**

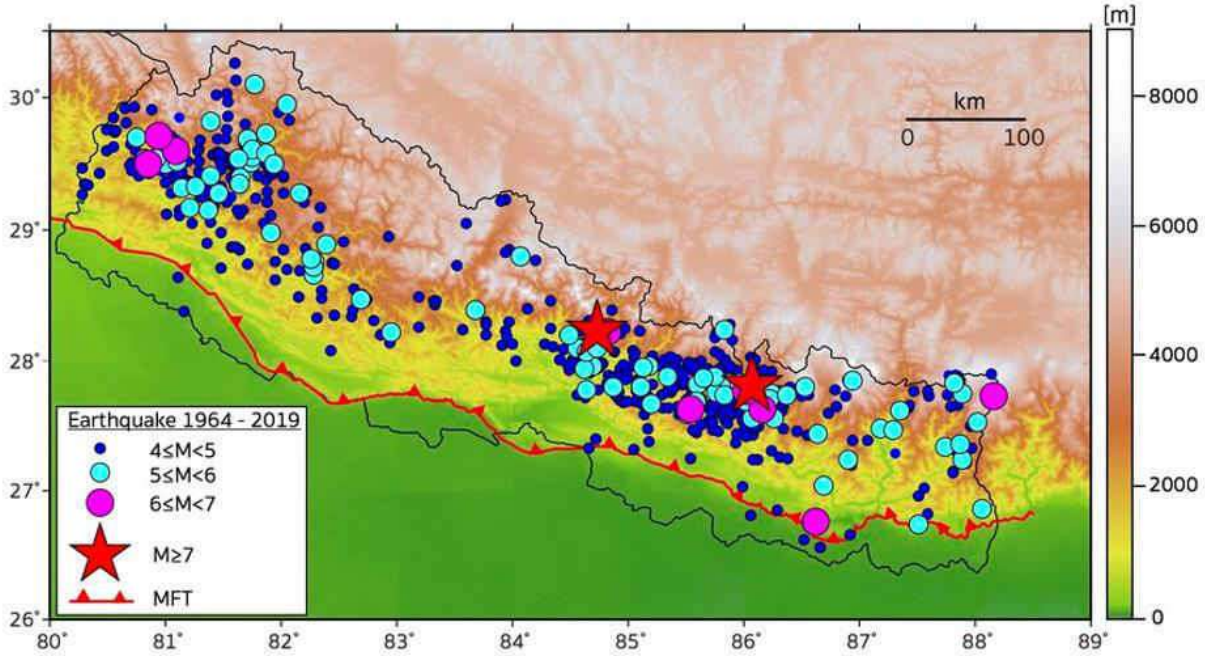


Figure 3-5: Seismicity map of Nepal from 1964 -2019[4]

3.1.4 Climate

The climate of the Subproject area is sub-tropical. According to DHM 2021, the average temperature at the project area varied from 8.0°C to 34.0°C. The relative humidity is in the range of 84% to 87 %. The average annual rainfall is estimated at approximately 1,868.5 mm per year. Almost 80% of rainfall occurs during monsoon (June to September).

[3] *Source: Department of Mines and Geology (DMG), 2020*

[4] *Source: USGS catalogue, 2019*

3.1.5 Air, Noise, Water Quality and Polluting Sources

The major air polluting sources recorded are only from vehicular emission and dust problem from plying of vehicles and high wind velocity. Noise polluting sources noted at the time of field study are similar to the air polluting sources. Unnecessary honking along the access road of site is the source of noise generation. Following table shows the real-time quality of air and noise during field study.

Table 3-1: Ambient Air and Noise Quality within the Proposed Subproject Site

SN	Location/ Chainage	**Air Quality[5]-**Temtop Airing-1000 PM Detector (µg/m^3)					**Noise Level -**UNI-T UT 353 Mini Sound Meter (dB)		
		$PM_{2.5}$	**Level**	**PM_{10}**	**Level**	**Average Time of Measurement**	**Measured**	**Ref.[6]**	**Area**
1.	Tapping Point	38.5	100	35.4	200	1-hour	36	50	Residential Area
2.	Substation	22.7		27.9			39.1		

Source: Field Visit, 2021

The air quality of the SPA was found within the range of national ambient air quality standard while noise was found above noise quality standard because of the vehicular noise nearby the settlement area.

Different crossings of streams and rivers were found along the proposed distribution line alignment. The proposed distribution line crosses the Salagad Khola at Chainage 4+000, 5+100 and 5+700, Kharkhara Khola at Chainage 12+550, Bheri River at Chainage 13+800, 17+000, 17+650, 21+000, 22+500, and 22+900, Jaligad Khola at Chainage 20+650 and Tasu Khola at Chainage 24+800. Thuli Bheri River lies about 300m far from both tapping point that is Chauka or Danipipal. The physical parameter of the Bheri River was tested nearby tapping point.

Table 3-2: Water Quality of Stream along the Distribution Line Route

SN	DL/ SS	Location	River/ Stream Name	Flood plain width (m)	DL distance from Stream	**Parameter-** *EXTECH ExStik II DO600*					
						Temp. (^oC)	***Ref[7].***	***pH***	***Ref.***	***EC (µc/cm)***	***Ref.***
1.	DL	Tribeni Nalgad Municipality-8, Kayakhet (Ch. 10+500)	Bheri River	189	30m	24.1	<40^o C	7.1	5.5-9.0	120	1500

Source: Field Visit, 2021

[5] *National Indoor Air Quality Standard, 2009*

[6] *National Ambient Sound Quality Standard, 2012*

[7] *Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem, 2019*

The water quality of the Bheri River was found to be within the limit of acceptance for the aquatic life in the stream. The water parameter data is compared with Nepal Water Quality Guidelines for the Protection of Aquatic Ecosystem. The construction activities of the Subproject components will not have impact to the local stream.

3.1.6 Solid Waste Management

Wastes were found littered in front of HHs and along the side of the access road near Subproject areas. People of the nearby area were found managing organic wastes within the household premises. Recyclable wastes (large quantity) were sold to scrap collector occasionally. The estimated quantity of solid waste generation from the labor camp is shown in **Table 3-3**.

Table 3-3: Estimated Daily Solid Waste Generation from Campsite

SN	Description	Calculation	Remarks
1.	Total Labors within the Campsite	= 20 Labors	
2.	Total Waste Generation to be Expected	= 20 * 123.62 g/capita/day = 2472.4 g/capita/day = 2.4724 kg/day	
3.	Organic Waste Composition Responsible for Foul Smell, and Rodents	= 1.26 kg/day	Assuming 51% organic waste
Rest other waste is recyclable, and non-decomposable which could be stored for long period, and have less impact on the environment if properly managed. The amount of organic waste is manageable within the Subproject site as organic waste per day will be expected to be only 1.26 kg/day.			

3.2 Biological Environment

The proposed substations area land is Government of barren type. No need to cut any trees at substation site. The proposed Subproject's distribution line passes from the edge of Koti Simla Community Forest (CF), Kalika CF lies in Rukum West while tapping from. Also, line passes from Salleri CF, and Vampopatal CF while tapping from Danipipal. The proposed Subproject lies within the elevation range from 890 to 2917 masl of Rukum West and Jajarkot District and thus is located in upper tropical bioclimatic zone. The proposed Subproject site does not lie within any protected area and conservation area.

The vegetation species recorded during the screening field visit are Khashru (*Quercus semecarpifolia*), Chir pine (*Pinus roxburghii*), Banmara (*Ageratina adenophora*), Chutro (*Berberis aristata*), Utis (*Alnus nepalensis*), Rhododendron (*Rhododendron arboretum*), Banj (*Quercus leucotrichophora*), Kaphal (*Myrica esculenta*) and Buki phool (*Anaphalis contorta*). Similarly, wild animal recorded during the public consultation are: Marsh Rabbit (*Sylvilagus palustris*), Jackel (*Canis aureus*), and Malayan Porcupine (*Hystrix brachyuran*). Altogether six species of birds were noted around the surrounding project area; House Crow (*Corvus splendis),* Spotted Dove (*Streptopelia chinensis),* Rose Ringed Parakeet (*Psittacula krameria),* House Sparrow (*Passer domesticus),* Tree Sparrow (*Passer montanus),* and

Jureli *(Hypsipetes leucocephalus).* All these bird species are of least concern under IUCN categorization.

The Dhorpatan Hunting Reserve lies at a distance of 32 km from the proposed substation site, thus there will be no any impact to the protected species of the Hunting Reserve. The proposed 33 kV distribution line passes through the 8 different CF as shown in **Table 3-4**. A total of 3.81 ha of the forest area will be occupied by RoW of proposed 33 kV distribution line. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 856.

Table 3-4: Forest type along the proposed distribution line

SN	Name of CF	Chainage	District	Municipality /RM	Ward no.
1	Khaireni Churi	11+400-12+200	Rukum West	Aathbiskot Municipality	7
2	Kaina Patal	12+400-12+650	Rukum West	Aathbiskot Municipality	6
3	Rani Ban	14+200-15+600	Rukum West	Aathbiskot Municipality	9
4	Salleri	16+000-16+600	Rukum West	Aathbiskot Municipality	10
5	Salleri	17+500-18+800	Rukum West	Aathbiskot Municipality	10
6	Bagi Mela	21+400-21+600	Rukum West	Bafikot RM	7
7	Ghari Vir	22+800-23+000	Rukum West	Bafikot RM	7
8	Tin Kholi	23+000-24+600	Rukum West	Bafikot RM	7
9	Vampu Patal	25+920	Rukum West	Bafikot RM	6

3.3 Socio-economic Environment

Demography and Ethnic Compositions: The Subproject area lies in Ward No. 7 of Bafikot Rural Municipality, Ward No. 10, 9 and 7 of Aathbiskot Municipality of Rukum West district and Ward No. 8, 9 and 10 of Tribeni Nalagad Municipality of Jajarkot, Karnali Province. Chaurjhari, Musikot and Khalanga are the nearest business markets nearby the Subproject area. The general demographic information of the affected Municipality is presented in Table 3-3. The major ethnic compositions within the surrounding project area i.e., Ward No. 10, 9 and 7 of Aathbiskot Municipality and Ward No. 8, 9 and 10 of Tribeni Nalagad Municipality are Chhetri (46.3%), Dalit (29.0%), Thakuri (15.2%), and Magar (6.1%) of total population of 16,184. Majority of people follow Hindu religion and rest follow Buddhism and Christian religion. The Core Project Area (CPA) of the Subproject will not affect any indigenous people.

Table 3-5: General Demographic Characteristic of Subproject Municipality

S.N.	Name of Municipality /RM	Ward No	HH	Population		
				Male	Female	Total
1	Bafikot RM	7	440	1204	1276	2480
2	Aathbiskot Municipality.	7	307	782	795	1577
3		9	661	1642	1696	3338
4		10	571	1401	1450	2851
5	Tribeni Nalgad Municipality	8	560	1511	1499	3010
6		9	283	809	763	1572
7		10	267	635	712	1356
Total			**3089**	**7984**	**8191**	**16184**

Source: (CBS, Rural Municipality-Municipality Profile of Rukum West and Jajarkot District, 2018)

Road Accessibility: Subproject-Ward No. 8, 9 and 10 of Tribeni Nalgad Municipality of Jajarkot are connected to Jajarkot–Dolpa Road. The transportation facilities in this locality are medium. It is 30-45 minutes' walk to reach municipality and RM office from the Subproject area.

Electricity Beneficiaries: The implementation of the Subproject will increase the electricity beneficiaries to 3428 HHs, 30 commercial purposes and 10 industries. This will expand the electricity supply in the Subproject area with clean energy sources.

Water and Sanitation: Tap/piped water is the main source of drinking water in the surrounding Subproject area. About 66.7% of the households in the proposed Subproject's area have access to tap/piped water. Almost all the houses in the area have some sort of toilet facility.

Health Facility: The nearest and easily accessible health facility nearby the proposed Subproject's substation area is Mangma Health Post (Bafhikot Municipality, Ward No.7) located at a distance of 1.5 km from the site.

Communication: People of the Subproject have access to communication facilities mainly through mobile telephone services. In the Subproject area, people have access to local and national FM Radio networks and local newspaper facility.

Occupation: Agriculture is the main occupation of people in the Subproject area with nearly 65% contribution; small trade and business/enterprises and services are other occupation of people in the Subproject area. Intermittent tripping and voltage drop of electricity was adversely affecting irrigation of crops and daily household chores activities.

COVID-19: The coronavirus (COVID-19) pandemic has been defined as global health crisis; the virus has spread in almost all parts of Nepal. Heedful of its vulnerabilities, the Government of Nepal had enforced a nationwide lockdown in 2020/2021 and activated its federal, provincial and local level mechanisms to respond to the crisis. In case of any sudden surge or outbreak of COVID-19, quarantine facilities and immediate health support should be provided to the workers and personnel involved in construction.

Other seasonal and minor diseases like dengue, fever, sneezing, cough, gastritis, diabetes and mental disorder have been reported within the Subproject area.

4. ANTICIPATED ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

The environmental and social impacts predicted during the construction of proposed Subproject are discussed in this chapter. National Environmental Impact Assessment Guidelines (GoN, 2050) has been referred for the predicting of magnitude, extent, and duration of the project-induced environmental impacts in Subproject area. This chapter identifies the basic environmental and social impacts in the Subproject area that will arise during the construction. The detailed impacts of each domain of environmental and social safeguards have been addressed in this chapter.

4.1 Anticipated Beneficial Impacts

Construction Phase

4.1.1 Local Employment

Local employment will be created the construction phase. As mentioned in section 2.8 Workforce Requirement, the typical construction team will have 21 skilled manpower and 58 unskilled manpower for the period 10-12 months for the erection of poles and stringing the distribution lines and 16-18 months of time for the building of the substation. The local people within the SPA and OPA will be encouraged for employment during construction phase. Both male and female will get equal opportunity during construction. Based on the skill levels (skilled, semi-skilled and unskilled labor) local people will be used for the construction as far as possible. *The magnitude of impact is considered moderate, the extent is local, and the duration is short-term.*

Operation Phase

4.1.2 Local Economy and Enhancement in Rural Electrification

The local economy will benefit through improved reliability of electricity supply, which is a necessary condition for economic growth. Different industries within/nearby the proposed Subproject area will be established. Intermittent tripping and voltage drop problem nearby the settlement areas will be reduced. Upgrading and expansion of electricity distribution helps to way-out many electricity related issues and promotes the use of new types of home appliances, use of electric motors for irrigation, and establishment of small and large industries. *The magnitude of impact is considered high, the extent is local, and the duration is long-term.*

4.1.3 Greenhouse Gas Emission Balance

Net Green House Gas (GHG) emissions resulting from the Subproject area are expected to be low as the distribution lines will improve and expand electricity supply from clean energy sources. It will reduce the emission of GHG from the traditional source like Guitha (made from cow dung), firewood and timber along with commercial fuel Kerosene for cooking/lighting, heating and diesel for water pumping. *The magnitude of impact is high, the extent is local, and the duration is long term.*

4.2 Anticipated Adverse Impacts

A. Physical Environment

Construction Phase

4.2.1 Change in Land Use

The Subproject requires about 0.76 ha land for the substation. The proposed substation land area belongs to government land. The land will be managed by NEA and will be converted to the substation area surrounded by proper boundary wall. Distribution Line passes through edge of private, barren land and RoW of the Jajarkot–Dolpa road. The construction of the Subproject will bring change in land use permanently. Potential impacts caused by distribution lines will be limited to approximately 0.22 m of land for each pole, at the edge of roads and cultivated lands. *The impacts due to use of land will be moderate in magnitude, site specific and long term in duration.*

Mitigation Measures

- Steel Tubular Pole for distribution lines will be planted at the right way of existing road without hampering traffic movement. In case of cultivated land, minimal land will be used at the edge for planting the poles.
- Cropping calendar will be followed while planting poles and stringing of conductors so that standing crops will not be damaged.
- In case of loss of standing crops, compensation will be made to the respective land owner as per the prevailing market rate.

4.2.2 Air Quality

The impact on air quality during the construction period is expected to be insignificant, as site clearance, excavation, stockpiling of construction materials, waste burning at camp sites and equipment installation are localized and of short term. Transportation of the materials and movement of construction crew and equipment will have minor impact on air quality. *The impact on air quality will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors' vehicles and equipment should meet Nepali vehicle emissions standards.
- Dust emissions shall be controlled with using water sprays on earthen roads nearby settlements in substation area.
- Open burning of wastes should be strictly prohibited.
- Construction workers should use face masks at all times.
- All dust generating loads carried in open trucks should be covered.

4.2.3 Noise

Noise is inevitable during construction. As noted in section 3.1.5, noise is less around the substation area as the area is rural and settlement is sparse. Construction-related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites; construction related noise is not expected to exceed acceptable levels. *The impact on noise level will be minor in magnitude, site-specific in terms of extent, and of short duration.*

Mitigation Measures

- Contractors will be required to monitor noise during the construction.
- For substation site, a boundary walls serve as noise barrier, and it should be constructed as early as possible.

4.2.4 Drainage and Water Quality

Substation sites of 0.76 ha. will result in slight alteration of drainage patterns, although the alterations in drainage will not be quantifiable. Interference with drainage patterns will be temporary during construction phase only. The impact on water quality during the construction period is expected to be insignificant. Water will be used primarily as a cement additive for construction of substation foundations and boundary walls, and to control dust. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Storm water run-off from substation sites will be minimized and controlled with bunding temporary dikes (constructed boundary walls will also help contain run-off water).
- Proper management of ground drainage from camps as a preventive measure against breeding places of mosquitoes, and other pests.

4.2.5 Soil and Muck

As the proposed substation land's ground level is low, filling of soil is necessary. The required filling materials shall be purchased from nearby authorized crusher plant approved by local government. For distribution lines the excavation activity will be insignificant. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term.*

Mitigation Measures

- Soil required for filling shall be purchased from the nearby authorized crusher plant under local government.
- Soil shall be covered with tarpaulin while transporting it from earth-borrowing areas.
- Simultaneous water sprinkling and compaction of spoil shall be done using the roller.

4.2.6 Solid Wastes

The wastes generated during construction within the Subproject area are cement bags, iron bars, and other leftover construction materials, and waste generated by the labor camp. It might cause adverse impact if not properly managed. Organic wastes generated from labor camp may give foul smell, and attract rodents if not manage properly. Inorganic wastes generated during implementation shall be managed through source segregation. *The magnitude of impact is low, the extent is site-specific, and the duration is short-term*.

Mitigation Measures

- Source segregation of organic and inorganic wastes in different storage areas or facilities in the designated location.

- The organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered by thick layer of soil on daily basis.
- Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix shall be used as refills for ground leveling.
- Packing materials used for casing components should be recyclable.
- Recyclable wastes like left out/non-usable reinforcement bars and packing materials shall be sent or sold to scrap vendors.
- Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container and sealed carefully.
- Effective coordination shall be done with local level government for proper waste management during construction period.

Operation Phase

4.2.7 Electric and Fire Hazard

Employees performing servicing or maintenance of substations may be exposed to electric shock, burns and injuries from the unexpected energization or release of stored energy in the equipment. *The magnitude of impact is considered moderate, the extent is site-specific, and the duration is long term.*

Mitigation Measures

For this, the following mitigation measures will be practiced:

- Use of insulation, guarding, grounding, electrical protective devices, and safe work practices is advised.
- Boundary walls and security fences around substation are recommended to prevent unauthorized access.
- Only trained and authorized personnel shall be allowed for electrical works.
- Warning signs shall be installed.

B. Biological Environment

The proposed Subproject avoided the forestland or other sensitive biodiversity areas. Hence, there will be no significant impact, due to substations and other project physical outputs to the biological environment.

Construction Phase

4.2.8 Loss of Habitat

As the proposed substation area is a barren land and no issues of tree loss in substation area, whereas the 33 kV distribution line passes through the edges of road alignments, farm lands and forest areas. The total area of the forest area that will be occupied within RoW of the proposed 33 kV distribution line is 3.81 ha. The estimated number of trees to be cleared from the Core Project Area of the distribution line alignment passes along different community forests are 856. The possible use of firewood should be restricted during the construction activities. *The magnitude of impact is moderate, the extent is site-specific, and the duration is long term.*

Table 4-1: Detail of impacted forest area and trees loss

Area (ha)			Name of species	No. of trees	
33kV line	Substation	Total		33kV line	Substation
3.81	-	3.81	*Quercus semecarpifolia*	109	-
			Alnus nepalensis	88	-
			Rhorodendron arboretum	68	-
			Quercus leucotrichophora	395	-
			Myrica esculenta	27	-
			Pinus roxburghii	169	-
			Total	**856**	

Mitigation Measures

- Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019),
- Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.
- Workers and staffs should be restricted to use firewood for cooking.
- Providing LPG based stoves in Labor camp.
- Labors and staff shall be made aware to avoid illegal activities in adjoining forest.

Operation Phase

4.2.1 Bird electrocution and collision

The Subproject area is located in rural setting and there is no presence of critical habitat of avian fauna. Electrocution is a risk to bird species that perch on power line infrastructures (substations and distribution lines). List of birds presented in section 3.2, may collide to distribution lines and substation. Minimizing bird collision and electrocution risk is therefore a win-win for biodiversity and the power sector. *The magnitude of impact is low, the extent is site-specific, and the duration is long term.*

Mitigation Measures

- Bird guards should be installed above the poles and white spirals in the conductors to improve visibility electrical structures.

C. Socio-Economic and Cultural Environment

The anticipated impacts regarding the socio-economic and cultural environment associated with Subproject are discussed below:

Construction Phase

4.2.2 Land Requirement

The land required for the proposed substation area is 0.76 ha, is the government land, that will be managed by NEA later. This has been confirmed officially through Ward Office, Banphikot RM. NEA is given the right to use the land to build and operate a substation. The construction activities of the Subproject will not involve any private land. So, there will

be no land acquisition, and thus no resettlement impacts. For the construction of distribution lines, owners of private land along the route have assured and committed for necessary help and support during implementation. They have agreed on NEA's proposal that poles shall be installed on the edge of cultivated lands and appropriate compensation for the loss of crops shall be given (**Annex 5**). Compensation shall be made on the basis of crops types and quantity of loss equivalent to the market price. *The impacts will be low in magnitude, site specific, and long term in duration.*

Mitigation Measures

- Distribution pole of diameter 0.22 m should be installed on the edge of cultivated land making no loss of standing crops.
- If there is loss of crops, appropriate compensation shall be made.

4.2.3 Public Health

Construction activities will be of small scale, causing no significant adverse impact to existing quality of air, water and sound. Local people except the workers do not involve in construction activities. Considering COVID-19 pandemic as an example, workers will be advised to avoid unnecessary contact with local people. *The magnitude of impact is low, the extent is site-specific, and the duration is short term.*

Mitigation Measures

- Contractors shall implement health and safety plans.
- Awareness on HIV/AIDS and other sexually transmitted disease should be provided to the labors.
- Awareness on basic sanitation and waste management should be provided to the labors.

4.2.9 Occupational Hazards and Safety of Workers

Occupational health hazard and safety of workers is the major issue during the construction period. Working without adopting safety measures during excavation work, spoil management work, mechanical and electrical equipment handling activities, chemical handling, etc. during construction may call the risk of accident. Primary victims are the workers involved in the construction. *So, the envisaged direct impact is high in magnitude, site specific in extent, short term in duration.*

Mitigation Measures

- Contractor shall prepare the Environmental, Health and Safety plan and take approval from the Client (NEA/PIU). Contractor shall employ Safety officer during construction period.
- All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. The Contractor will adhere to labor Act 2074 and Labor Rules 2075.
- The basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid are required for the campsite.
- All the workers shall have health insurance over the period of construction.
- Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs) as shown in ***An*nex 7**.

- NEA will be responsible to supervise the EHS performance of the construction Contractor, and worker's health and safety.

4.2.10 Child Labor, and Gender Issues

During the construction period, people employed on daily wages for excavation, transportation of construction materials, and other construction-related works should avoid the involvement children and should avoid gender discrimination. Gender discrimination may occur as the Contractor may not be sensitive towards gender equity. Contractors should equally pay men and women workers. Construction area should be gender friendly with required facilities. *The envisaged impact is high in magnitude, site-specific in extent, and short-term in duration.*

Mitigation Measures
The Subproject will ensure to:
- Provide equal wage to male and female for similar nature of work.
- Restrict use of child labor i.e., below 16 years of age (which is as per government and ILO guidelines).
- Provide female friendly construction environment with separate cabins and toilet for women in the camp.
- Prepare suitable work categorization for women.

4.2.11 Socially Undesirable Activities

The workers may use alcohol and other forms of intoxication, gamble and quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities in and around the project area. *So, the envisaged impact is low in magnitude, local in extent, and short-term in duration.*

Mitigation Measures.
- Restrict movement of workers out of camp after dinner time in the night.
- Prohibit the use of alcohol and gambling in the camp.
- Supply water supply, daily consumable items, communication facility in the camp so as not to create additional pressure on the local services.
- Orient workers to show respect to local tradition and culture.
- Prepare a code of conduct for all project staff, orient them and monitor that these are effectively followed by all.
- Assign a public relation officer to keep close and regular consultation and coordination with local communities.
- Regular monitoring of workers' behavior and take appropriate measure on rule violators.

Operation Phase

4.2.1 Hazards and Safety

Occupational health hazard and safety of staffs is the major issues during the operation phase of the substation. The possible electric shock and fire hazard might cause injury or

death to working staffs thus the protection measures should be taken all the time. *The envisaged direct impact is high in magnitude, site specific in extent, long term in duration.*

Mitigation Measures

- There will be the use of insulation, guarding, grounding, electrical protective devices, and safe work practices.
- Boundary walls and / or security fences around substations to prevent unauthorized access.
- Only trained and authorized personnel will be allowed for the electrical works.
- No electric wire shall be stringed above the house.
- Security fences around the substation.
- Establishment of warning signs
- Shutdown shall be taken during work on DL route

4.2.2 Electric and Magnetic Field Effect

Electric power distribution lines create electric and magnetic field together, referred to as electromagnetic fields (EMF). Electrical flux density declines in inverse proportion to the square of the distance and magnetic fields decline in inverse proportion to the cube of the distance; so, there will be no impact outside of the substation boundaries. [8] Research on the long-term effects of EMF associated with distribution lines is inconclusive with respect to health risks. As noted in the World Bank EHS guidelines for transmission and distribution systems, there is no empirical data demonstrating adverse health effects from exposure to typical EMF levels from power transmissions lines and equipment.

[8] E.g., at a distance of 10 meters from a single distribution line or conductor, electrical flux density drops to 1% of the field strength at a distance of 1 meter from the conductor: 1/ (10*10) = 1%. Likewise, the magnetic field drops to 0.1% of the field strength at the conductor: 1/ (10*10*10) = 0.1%.

5. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

5.1 Methodology in Information Disclosure, Consultation and Participation

The following methodologies were followed for information disclosure, consultation and participation:

i. Identification of the stakeholder is important to understand how the Subproject activities will engage with different institution/groups/individuals. The stakeholders are the groups that might be affected by the Subproject or might influence Subproject outcomes. The identified stakeholders are considered in three groups (**Figure 5-1**).

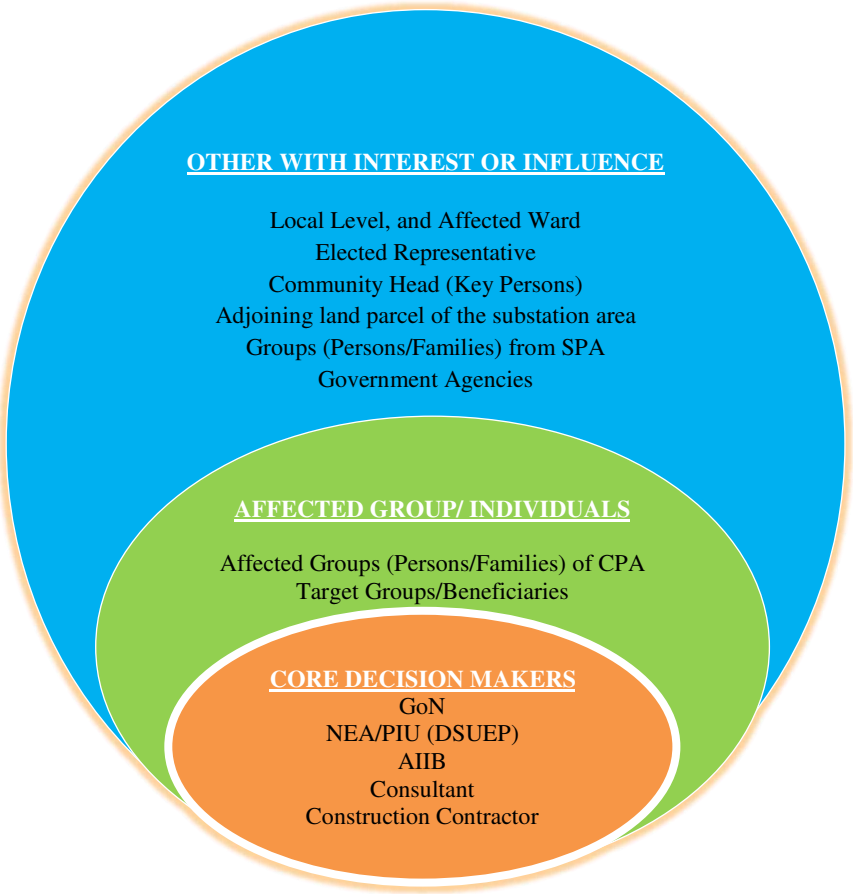


Figure 5-1: Identified Stakeholder in the Subproject[9]

ii. The notice with subject of consultation, venue, and time was pasted at Subproject footprint area, local level and affected Ward office in presence of concerned local stakeholders (**Annex 1**). People were explained about the notices and their views were noted and agreed as Minutes.

iii. Study team members visited all the local government offices within the Subproject influence area. Representatives from each local body were also consulted. All local governments were given request letters for their active support in project implementation. Municipalities were requested to provide written suggestions. The

[9] *Referenced Meaningful stakeholder engagement: a joint publication of the MFI working group on environmental and social standards / Reidar Kvam, PP-19, 2019.*

deed of enquiry (Muchulkas) and Letter of Declaration from the stakeholders are presented in **Annex 6 and Annex 7**.

iv. Local communities nearby substation area and along the distribution line routes were consulted,and were briefed about the Subproject activities and likely benefits with their suggestions (included in the Minutes).

v. During the Subproject construction phase, booklets informing about the Subproject activities, likely impacts and mitigation measures together with the complaints handling mechanisms will be developed and distributed in the Subproject area.

5.2 Consultation and Information Disclosure

Consultation aims to encourage participation of stakeholders and communities of the Subproject area in identification of issues, comments and suggestions. The Subproject affected groups (persons/families) were given more emphasis during the field consultations. Public consultations were conducted at Athbiskot Municipality, Ward No. 9, Radijiula, Nalgad Municipality, Ward No.10, Radijiula and Nalgad Municipality, Ward No.11, Chaukha on 11th February, 2022 (**Figure 5-2**). The concerns expressed and issues/ raised during the consultation were documented as in the form of minutes (**Annex 5**).

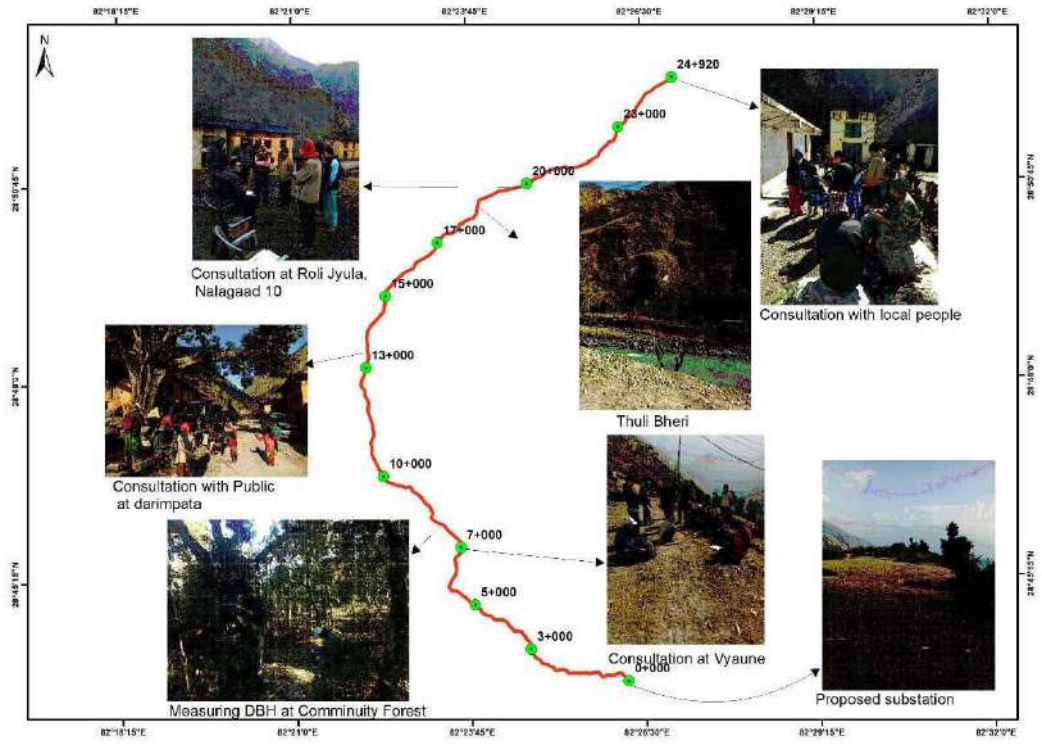


Figure 5-2: Consultation with the stakeholders and communities in the Subproject Area.[10]

Major benefits expected from the implementation of Subproject through the perspective of local people were identified from public interaction, and that included improvement in the rural electrification facilities ensuring the uninterrupted electricity in the households and

[10] *Field Study, 2021. Used SW Map and GIS*

better functioning of industries in the locality. The issues, comments and suggestions received in the consultation are presented in **Table 5-1**.

5.3 Comments and Suggestion Received

Table 5-1: Summary of issues, comments and suggestions received in Consultations

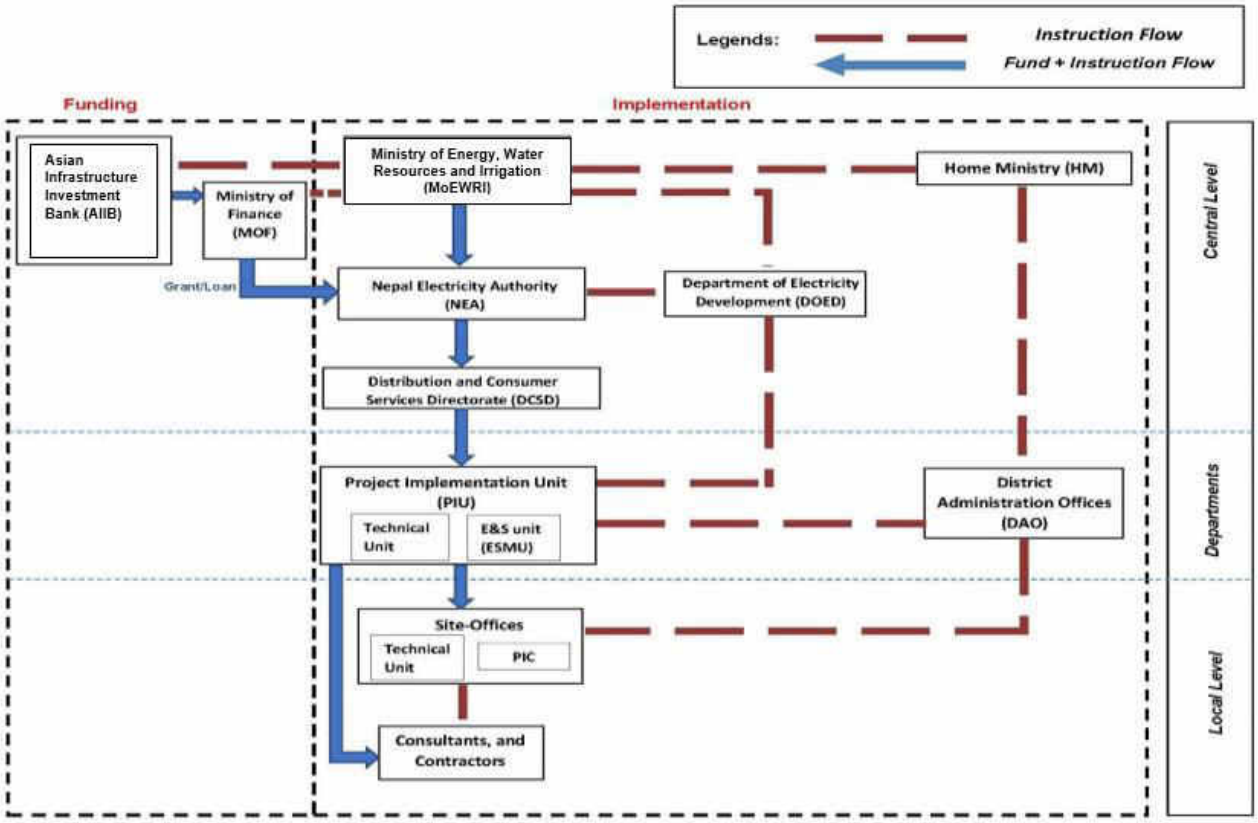
Source: Field Visit, 2021

Date	Location	Issues, comments and suggestions received	Participants
11th February, 2022	Athbiskot Municipality, Ward No.10, Radijiula	• The distribution line should be installed away from the settlements area and private land. In case if it has to be passed through the private land, the pole should be installed at the edge (the up and down the side of the land). • The local people should be given priority for the employment based on the knowledge and skill in the construction of the project. • While constructing the sub-project, there should not be any negative impacts on archaeological, religious momentous, or to any structures of public importance. If case of any negative impacts, the project should have to manage it appropriately • It is informed that there are no residences of indigenous people within the direct project affected area. • There is electricity supply with inadequate voltage supply in this area. It is requested that the project should start its construction immediately to ensure reliable electricity service to the local people. • It is informed that there is no difficulty if in case of the proposed Subproject has to be passed through the private land; the local level will consult and coordinate with landowners. • The construction of this proposed sub-project will have the support and cooperation of local level and stakeholder. • It is informed that there are no any places of ritual and cultural importance in the project area.	18,3F-15M
	Nalgad Municipality, Ward No.10, Radijiula		19,5F-14M
	Nalgad Municipality, Ward No.11, Chaukha		22,3F-19M

6. INSTITUTIONAL ARRANGEMENT AND GRIEVANCE REDRESS MECHANISM

6.1 Institutional Arrangement

The Ministry of Energy, Water Resources and Irrigation (MEWRI) is responsible for overall planning and execution of the plans for the overall development of water and energy sector in Nepal. Nepal Electricity Authority (NEA) under MEWRI is the responsible agency for the implementation of the DSUEP. The project comes under Distribution and Consumer Services Directorate (DCSD) of NEA. Project Implementation Unit (PIU) under DSUEP is the implementing unit of the project. Environment and Social Management Unit will be within PIU. All the resources needed for the EMP implementation for the construction and operation phase will be provided by the PIU. The site offices under PIU will have the supervision consultant with environmental and social safeguard specialist, who will be responsible for compliance monitoring activities during the construction phase. He will also provide technical support in preparing the monitoring report.



Source: ESMF-DSUEP

Figure 6-1: Institutional Arrangement for Environmental and Social Management

Contractor shall have the main responsibility to ensure the compliance. The Contractor shall prepare an Environment, Health and Safety (EHS) report that would be approved by DSUEP/PIU before field mobilization. They need to strictly follow the EHS plan requirements. Contractor shall urgently comply with corrective actions for any noncompliance as instructed by PIU. The ESMU of PIU shall provide safeguard compliance orientation to all environment monitors and safeguard team of the contractor, one month before the construction works start.

6.2 Grievance Redress Mechanism

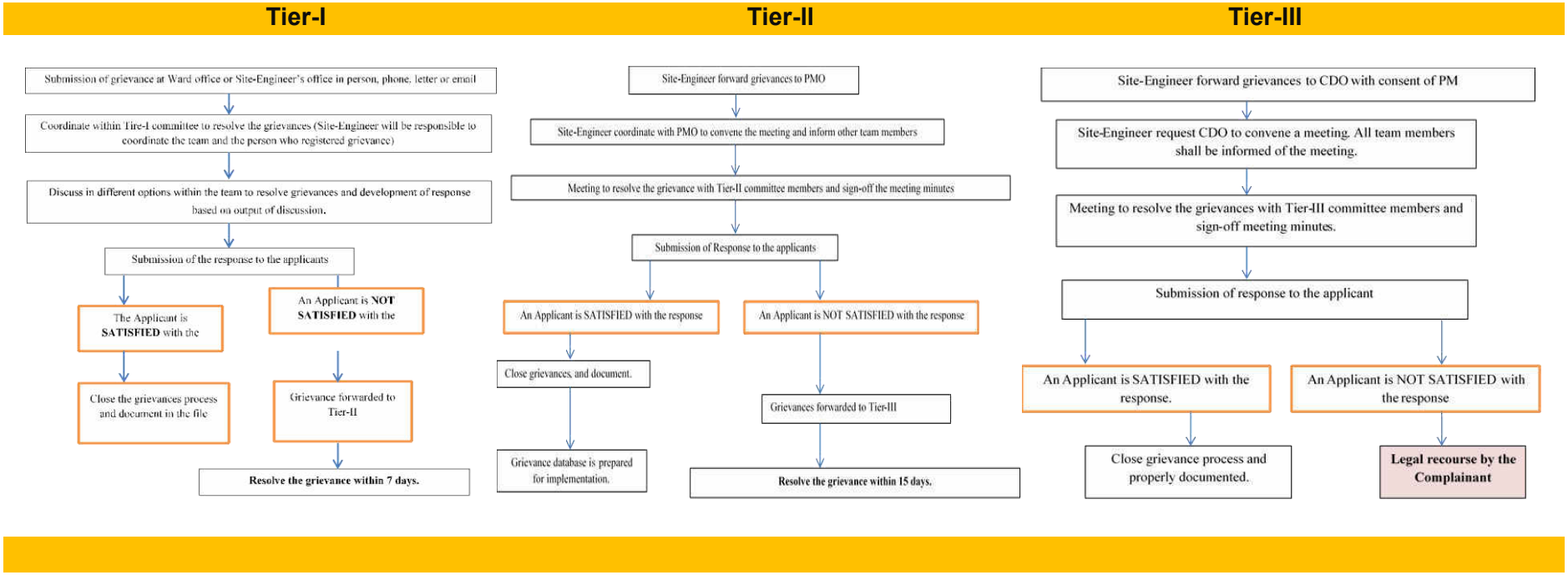
The Grievance Redress Mechanism (GRM) has been established to receive, evaluate, and facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental related issues at the subproject level. The GRM is designed to be simple, transparent and responsive. GRM shall address only the concerns arising due to the project implementation activities, mainly during construction stage. Social Comment Addressed -In each subproject, three levels Grievance Redress Mechanism will be established. During the ESMP study period NEA has disseminated letters to the local level stakeholders regarding the formation of the GRM at the subproject level. Till date NEA has established Tier-I and Tier-II GRM has been established at local wards level and Municipality/RM level. Tier-II will be established before construction work start.

GRM process entails the concerned party submitting a grievance either in-person, or via phone, letter, or email to the Site-Engineer or the concerned Municipality Chief or the concerned Ward Chair. The Site-Engineer will record such complaint. In cases where Ward Chair has received such grievance, he/she should forward the grievance to the field office Engineer. The Site-Engineer shall notify the committee members of Tier-I and arrange meeting to resolve the received grievances. If not resolved such grievances will be carried to Tier II and Tier III. The three levels of GRM will be based on time-bound schedules as mentioned in **Table 6-1**. The subproject will carry the regular meeting for Tier-I, once a month to follow up if any grievances are received or not and to resolve the grievances received and update its status to PIU. **Figure 6-2** describes the Workflow Diagram of GRM for the Subprojects.

Table 6-1: Levels of Grievance Redress Mechanism Based on Time Bound

Provisions	Levels of Grievance Redress Mechanism					
	First Level (Tier-I)		**Second Level (Tier-II)**		**Third Level (Tier-III)**	
Level	Local Level		Project Manager Office (PMO) headed by the Project Manager (PM) at Project Implementation Unit (PIU)		District Level	
Supervisory	NEA Site-Engineer		PMO		Chief District Officer (CDO)	
Assistance	Chief/Mayor of Concerned Local Level and Chairperson/ Representative of Ward, Construction Contractor's (CC) Representative and Project Supervision Consultant's (PSC) Safeguards Officer		NEA Site-Engineer and PSC's Social Expert, and Construction Contractor		PMO, affected persons, representative from Rural Municipality/Municipality, Site-Engineer, PSC's Social Expert. *If deemed necessary, representative from Forest Office, representative from Land Revenue Office, and representative from Land Survey Office are invited.*	
Days for Resolving Complain	7 days of receipt of a complaints/ grievance		15 days of complaints forwarded by Site-Engineer		15 days	
Committee Members	**Committee Member**	**Designation**	**Committee Member**	**Designation**	**Committee Member**	**Designation**
	Municipality Chief	Coordinator	Project Manager	Coordinator	Chief District Officer (CDO)	Chair
	Site-Engineer-NEA	Member secretary	Site-Engineer	Member Secretary	Project Manager	Coordinator
	Safeguards Expert from Consultant	Member	Municipality Chief	Member	Site-Engineer	Member Secretary
	Contractor Engineer	Member	Safeguards Expert from Consultant	Member	Municipality Chief/Ward Chair	Member
	Ward Chair	Member	Contractor Engineer	Member	Safeguards expert from consultant	Member
					Contractor Engineer	Member
					Representative from affected people	Member

Figure 6-2: Workflow Diagram for GRM from NEA[11]



***** Affected People (AP) have the right to refer the grievances to appropriate courts of law if not satisfied with the redress at any stage of the process i.e., the AP will have the choice to approach country's judicial system.

[11] *Grievance Redress Mechanism (GRM) Prepared for the sub-projects financed by Asian Infrastructure Investment Bank (AIIB) under Distribution System Upgrade and Expansion Project (DSUEP), Nepal Electricity Authority (NEA), May 2021.*

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Environmental and Social Management Plan and Mitigation Measures

The overall Environmental and Social Management Plan of the Subproject is presented in **Table 7-1**. The ESMP will be implemented in three stages: (i) pre-construction (ii) construction, and (iii) operations and maintenance. This ESMP is living document and will be updated and modified under the supervision of ESMU of PIU.

Table 7-1: Environmental and Social Management Plan (ESMP)

Project Activity	Environmental and Social Issues	Management/Mitigation Measures	Mitigation Cost	Responsibility	
				Planning and Implementation	Supervision and Monitoring
Pre-construction Phase					
Approvals, permits and clearances	• Installation of poles along the edge of private farm lands	• Site office and the contractor must inform the community prior to the installation of poles and stringing of the line along DL route		Site Office/ Contractor/	DSUEP (PIU)/NEA
Construction Phase					
Construction work in substation area and distribution line alignment	• Inadequate/unsafe working conditions	• Appropriate contract clauses to ensure satisfactory implementation of contractual environmental, health, and safety measures.		Site Office/Contractor	PIU/NEA
	• Accident may arise if the pit hole (depth-2m and diameter-0.22 m) prepared for steel tubular poles remains open for long time	• Pit holes for the steel tubular pole shall not be left open and should be filled instantly by erecting poles and concrete-cement around the base, should be used to strengthen the pole erection • Contractors should follow the guideline provided by the PIU	Project Cost	Contractor/ Site Office	PIU/ESMU/ PIU
	• Dust emission - transportation of materials and movement of construction crews	• Water sprays to be used for dust control as necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil) to be stored in substation	Air Quality Monitoring-1,50,000.00 (NRs.) Sprinkling water (Dust Management)	Contractor/ Site Office	PIU/ESMU

	and equipment will cause minor impact	area. • Steel poles firstly stocked in the substation area and secondly in the open barren area in coordination with Municipalities and Rural Municipalities. No social and environmental issues for the stockpiling of the steel poles and stringing wires	2,00,000.00 (NRs.)		
	• Noise emission-Construction related noise will be limited to vehicular movement and inside-the-fence construction activities at substations sites	• Boundary walls serves as a noise barrier, and these shall be constructed as early as possible. • Construction equipment to meet national emissions and noise control standards.	Noise Level Monitoring-50,000.00 (NRs.) Provision of PPE in Project Cost	Contractor/ Site Office	PIU/ESMU
	• Interference with drainage patterns will be temporary at substation during construction phase	• A proper drainage system should be managed within the substation area. • Storm water run-off need to be minimized and controlled with bunding temporary dikes • Drainage management as a preventive measure against breeding of mosquitoes and other pests	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Construction associated wastes generated within substation area and campsite location	• Organic waste generated from the campsite shall be managed within the substation premises, through composting in the bin or by constructing a ground pit, and covered, by a thick layer of soil • Reusable waste like debris, broken brick pieces, sand, stone, waste cement, and sand mix should be used as refills for ground leveling. • Recyclable wastes like left out/non-usable	Solid wastes management – 1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU

		reinforcement bars, and packing materials to be sent or sold to scrap vendors. • Effective coordination with local level government for the proper waste management			
	• Illegal fishing and bird hunting by the labors	• Discouraged by supplying adequate food item (poultry) requirement within the camp. • Awareness on legal provisions upon illegal hunting of biodiversity need to be disseminated	Project Cost	Contractor/ Site Office	PIU/ESMU
	• About 3.81 ha. of forest area occurs within RoW of the DL • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 856	• Compensatory plantation shall be done as per Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019), • Compensatory plantation to be made in the ratio 1:10, including cost for sapling and management cost for 5 years.	The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report		
	• Use of firewood from nearby forests	• Labors and staff are to be aware for not make firework activities • Provision of use of LPG gas in the Labor camp	Project Cost	Contractor/ Site Office	PIU/ESMU
	• Loss of standing crops at pole installation locations (depth-2m and diameter-0.22 m)	• Pole to be installed at the edge of cultivated land making no loss of standing crops • Need to make prior consultation with landowner during installation of the pole and stringing of distribution lines • If there is loss of crops, appropriate compensation will be made by the project	Project Cost	Contractor/Site Office	PIU/ESMU
Environment, Health and Safety	• Injury and sicknesses workers	• Contractor shall prepare the Environmental, Health and Safety plan and take approval from the client. Provision of safety officer in the work		Contractor/Site Office	PIU/ESMU

	and members of the public • Potential fecal coliform contamination in drinking water	team shall be made during construction period. • All employees shall be provided with the necessary training, and safety equipment as required for their responsibilities and duties. • Basic facilities of drinking water, sanitation & clean resting place, canteen, and first aid shall be made available for the campsite. • Provision of health insurance to employees. • Security fences around the substation. • Installation of warning signs (High Voltage, Fire Safety Signs, and Emergency Signs). • Awareness on HIV/AIDS and other sexually transmitted disease. • Awareness on providing basic sanitation facilities and waste management control to the labors. • For coronavirus (COVID-19) pandemic situation, Contractors should arrange for quarantine and health services for infected workers.	Establishment of Labor Camp with basic facilities – In Project Cost EHS Awareness Trainings -1,50,000.00 (NRs.) COVID-19 measures 2,00,000.00 (NRs.)		
Management of electric equipment's, toxic materials of chemical wastes	• Possible spills resulting in contamination of soil, water, and air	• Chemical waste generated from transformer shall be collected in leakage proof, corrosion free, specially designed container, and sealed carefully	1,00,000.00 (NRs.)	Contractor/ Site Office	PIU/ESMU
Operation and Maintenance Phase					
Electric shock and fire hazard	• Injury or death to the workers and	• Use of insulation, guarding, grounding, electrical protective devices, and safe work practices.	Project Cost	NEA	NEA

	public	• Boundary walls and / or security fences around substations to prevent unauthorized access. • Only trained and authorized personnel shall be allowed for the electrical works. • No electric wire to be stringed above the house. • Installation of warning signs.			
Routine operations and maintenance	• Potential disturbance to other utility functions and vehicular traffic.	• Maintain warning / advisory signs in good and visible condition • Visual and technical inspection	Project Cost	NEA	NEA
Oil spillage	• Contamination of land/nearby water bodies	• Substation transformers should be stored within secure and impervious bundled areas with a storage capacity of at least 110% of the capacity of oil in transformers and associated reserve tanks.	Project Cost	NEA	NEA
Bird electrocution and collision	Electrocution can cause a risk to bird species which perch on power line infrastructures	Provision of bird guards above the poles and white spirals on the conductors to improve visibility	Project Cost	NEA	NEA

(*The provision of environment and social management cost should be included in the project cost making each items visible in BOQ of bidding document for the safeguard compliance by the construction contractor*)

7.2 Proposed Monitoring Plan

The monitoring proposed in **Table 7-2** will be of value primarily for establishing baseline conditions in the Subproject area, and then for ambient quality monitoring.

Table 7-2: Minimum Provisions for Environmental Monitoring

Parameters to be Monitored	Location	Measurements	Frequency	Responsibility
Construction Stage				
Clearing of construction site	Substation boundaries	• Field inspection of Subproject Sites and ensure that appropriate safety measures are implemented	Clearing and restoration: weekly	Contractors to implement corporate EHS plan, drainage management and solid waste control in substation area.
Use of forest area and loss of trees	33 kV DL alignment	• Field inspection of Subproject sites and ensure the compensatory plantation of 1:10 • Related approval document for tree clearance	Prior to the construction work	Contractor responsibility under the supervision of PIU/DFO
Air: SPM, Noise: dB	Substation boundaries and nearest receptor to substation	• Spot check for noise and dust using portable monitoring device	Air, and noise: quarterly during construction period	Contractors need to conduct the air and noise monitoring during the construction period at the substation location

Construction wastes: on-site inspection	Visual inspection of active construction areas, including equipment staging areas and camps	• Spot check / visual inspection of solid waste (spoil, muck etc.) generation and disposal. • Analysis of transformer oils to determine if polychlorinated biphenyls are present.	Monthly spot checks for construction waste management	PIU safeguard officers to provide oversight via regular field inspections, and submit monitoring reports to the Bank
Occupational health and safety	Substation boundaries	• No. of Toolbox talk and safety orientation to the workers • No. of workplace accidents • Use of PPE by workers	Daily Inspection during construction Monthly Inspection during operation phase	Inspection of the construction site by safety officer and PIU safeguard officer
Child involvement in construction work (need to be prohibited)	Substation work	• Spot inspection at construction sites	Monthly Inspection during construction	Site Office

7.3 Environmental and Social Mitigation and Monitoring Cost

Preliminary cost estimates for the ESMP implementation are shown in **Table 7-3**. These estimates cover the basic monitoring activities and the mitigation measures to be complied from the contractor's side. The ESMP cost estimated for the **Athbiskot–Vampuchaur Distribution Line** is NRs 13,00,000.00. The community support activities and the costs will be presented in the Community Development Plan (CDP). NEA has agreed for the effective implementation of the mitigation and monitoring cost items as mentioned in table below.

Table 7-3: Mitigation Measures and Monitoring Activities Cost Estimates

SN	Budget Items	Unit	Rate (NRs.)	Total Amount (NRs)
1	Air Quality Monitoring (at substation)	6 (Times)	25,000.00	150,000.00
2	Noise Level Monitoring (at substation)	6 (Times)	8,334.00	50,000.00
3	Sprinkling of water to be used for dust control necessary in the earthen roads of the settlements nearby the substation area and proper storage of the construction materials (sand, cements, aggregates and spoil)	200 (Times) During Excavation and Civil works	1000.00	2,00,000.00
4	Management of electric equipment's, toxic materials of chemical wastes	-	L.S.	1,00,000.00
5	Segregation and management of solid wastes	-	L.S.	1,00,000.00
6	COVID-19 measures (considering pandemic situation) standardize the quarantine facilities with health aid to the labors	-	L.S.	200,000.00
7	EHS Awareness raising trainings to the labors	10 (Events)	15,000.00	1,50,000.00
8	Meeting of Safeguard Desk and Grievance Redress Committee at Field Level	24 (Months)	14,583.00	3,50,000.00
Total				**13,00,000.00**

8. CONCLUSION

Potential environmental impacts of this Subproject are not diverse and are all site-specific i.e., confined to the Core Project Area. Civil works will have minimal temporary impacts on air, noise and water quality. Erection of poles during construction shall follow right of way of existing roads and the edge of farmlands. The PIU should give prior information before installation of the poles. In the ESMP consultations conducted in the settlement area, people have agreed for the implementation of the Subproject and have suggested to install poles on the edge of farm-lands, without affecting any private structures along the distribution line. If there is loss of crops, appropriate compensation shall be provided. The implementation of the proposed Subproject needs 3.81 ha of forest area with estimated loss of 856 trees. The total enumeration of the loss trees and mitigation cost will be incorporated in the Brief Environmental Study (BES) report. Mitigation measures are suggested in this ESMP to avoid any possible environmental and social impacts. The total ESMP cost for this Subproject is NRs. 13,00,000.00. NEA Project Implementation Unit has agreed to implement the estimated cost for the mitigation measures and monitoring activities.

REFERENCES

CBS. (2019). Environmental Statistics of Nepal. Kathmandu: Central Bureau of Statistics.

CBS. (2018). Rural Municipality-Municipality Profile of Rukum West District. Rukum West: Office of Statistics.

CBS. (2018). Rural Municipality-Municipality Profile of Jajarkot District. Jajarkot: Office of Statistics.

DHM. (2021). Retrieved from http://mfd.gov.np/city?id=26

DoS. (2020). Data & Metadata. Retrieved from National Spatial Data Center: Geoportal: http://nationalgeoportal.gov.np

Environmental and Social Framework (ESF) Asian infrastructure investment Bank, Feb 2016 (Amended February 2019).

Environmental and Social Management Framework (DSUEP) NEA- November 2021

GoN (2019): Environmental Protection Act (EPA), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN (2020): Environmental Protection Rules (EPR), Ministry of Forests and Environment, Singhadurbar, Kathmandu

GoN. (2050). National Environmental Impact Assessment Guidelines. National Planning Commission Secretariat.

GoN. (2019). Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, Ministry of Forests and Environment, Singhadurbar, Kathmandu.

Shahi, D. K., Rijal, H. B., & Shukuya, M. (2019). Study on Household Energy Usage Patterns in Urban and Rural Areas. Journal of the Institute of Engineering, 15 (No. 3), 402-410. doi:https://doi.org/10.3126/jie.v15i3.32761

Stakeholder Engagement Strategy, DSUEP, NEA 2019.

The White Paper. (2018). Energy, Water Resources and Irrigation Sector's Status and Roadmap for the Future. Kathmandu: Government of Nepal.

WBG. (2018). https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2018&locations=NP&start=1996&view=chart. Retrieved from https://www.worldbank.org.

WECS. (2014). Energy Data Sheet. Water and Energy Commission Secretariat. www.energyefficiency.gov.np/downloadthis/final_data_book__11_june_2014.pdf

ANNEXES

Annex 1: SAMPLE NOTICE FOR PUBLIC CONSULTATION AND GRM FORMATION LETTER TO STAKEHOLDERS

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

नेपाल वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजनाको वातावरणीय तथा सामाजिक अध्ययन प्रतिवेदन तयारी सम्बन्धि सूचना

सूचना प्रकाशन मितिः .....

..... प्रदेश ..... जिल्ला .....(नगरपालिका/गाउँपालिका/महानगरपालिका/उपमहानगरपालिका) मा एसियन इन्फ्रास्ट्रकचर इन्भेस्टमेन्ट बैंकको ऋण सहयोग भएको नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना कार्यान्वायन हुनुभन्दा अघि सो आयोजनाले त्यस क्षेत्रको वातावरण तथा सामाजिक पक्षहरुमा के-कस्तो प्रभाव पार्दछ भनि स्थानीय सरोकारवालाहरु सँग छलफल गर्न आयोजना क्षेत्रका सम्पूर्ण सबै सरोकारवालाहरुको निम्न स्थान तथा समय उपस्थितिका लागि यो सूचना प्रकाशित गरिएको छ।

सार्वजनिक छलफल हुने स्थान, मिति र समय:

स्थान:

मिति:

समय:

नेपाल विद्युत प्राधिकरण

(नेपाल सरकारको स्वामित्व)

वितरण तथा ग्राहक सेवा निर्देशनालय

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

(ए.आई.आई.बि.)

फ्याक्स: ०१-४१५३१४४
फोन नं : ०१-४१५३१४५
दरबारमार्ग, काठमाण्डौं।

प.सं. ०७८/७९: 93८.

मिति: २०७८/१०/०७

श्री .....
.....

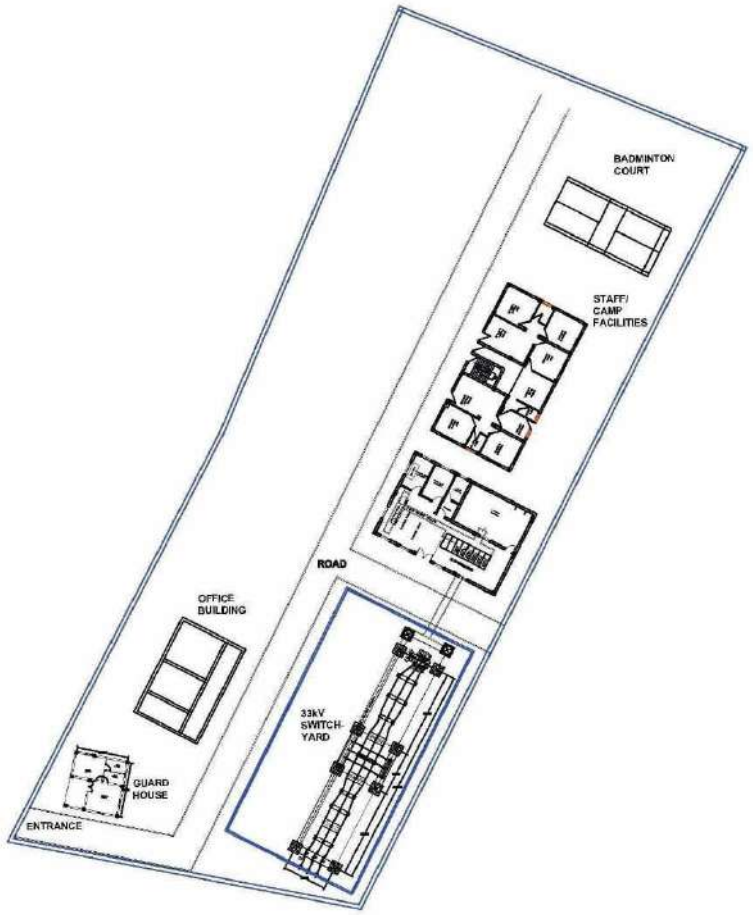
<u>विषय: गुनासो समाधान संयन्त्र गठन भएको सम्बन्धमा</u>।

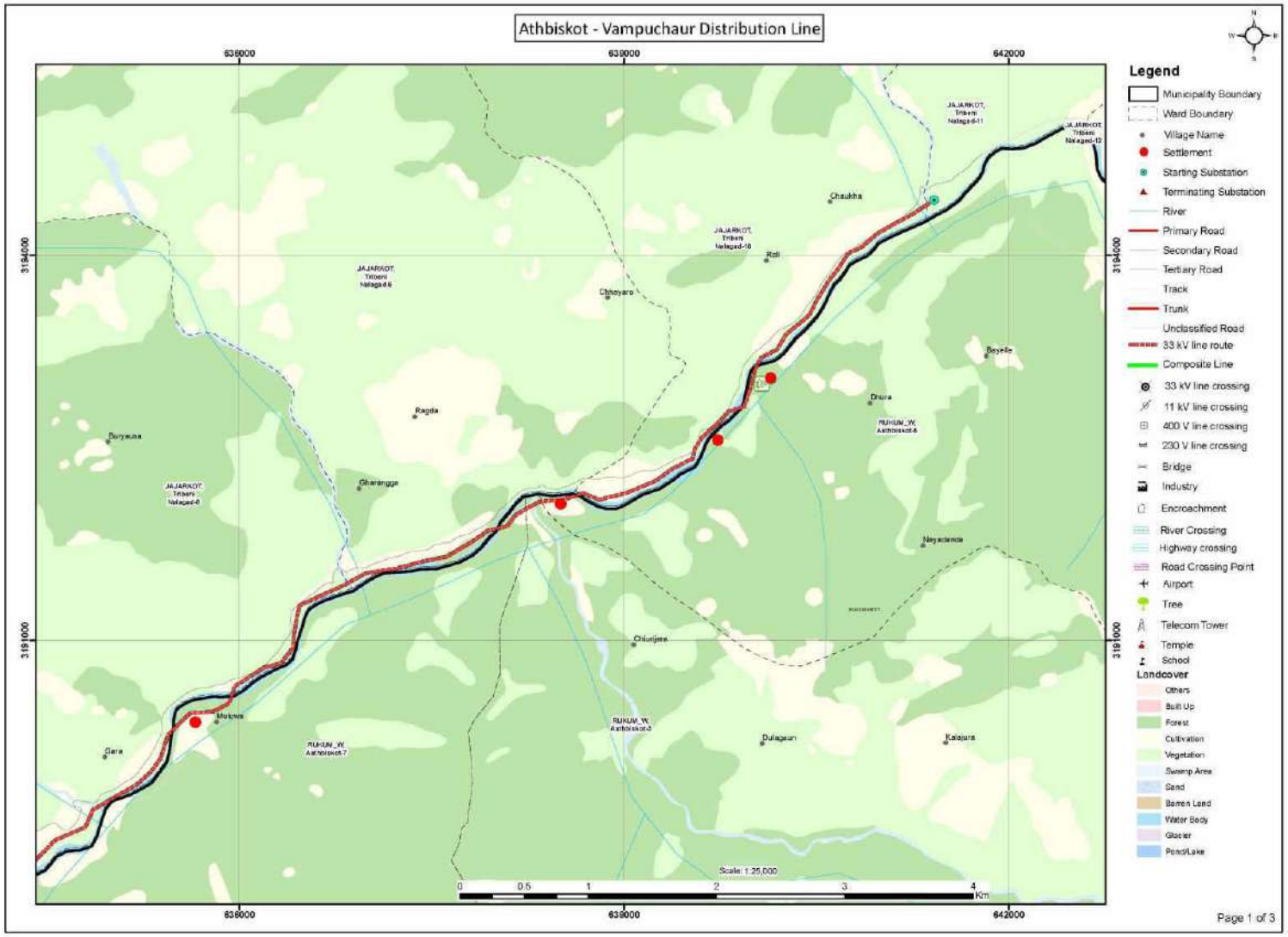
उपरोक्त विषयमा एसियन इन्फ्रास्ट्रकचर इन्वेस्टमेन्ट बैंक (ए.आई.आई.बि.) को ऋण-सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नति तथा विस्तार आयोजना (ए.आई.आई.बि.) प्रस्तावक रही कार्यान्वयन गर्न लागिएको ..... आयोजना अन्तर्गत नेपाल सरकारको पूर्ण-विद्युतीकरण गर्ने लक्ष्य बमोजिम तहाँ ***वडा/गाउँपालिका/नगरपालिका/उप-महानगरपालिकामा*** ३३/११ के.भी. सब-स्टेशन, ३३ के.भी. लाईन, ११ के.भी. लाईन, ४०० भी. लाईन, आदि निर्माण कार्यहरु हुने भएकोले सो कार्यहरु गर्दा स्थानीय सरोकारवालाहरुको कुनै गुनासो भए सो गुनासोको समाधान गर्न गुनासो समाधान संयन्त्र निर्माण गरिएको छ। अतः संलग्न गुनासो समाधान संयन्त्र दस्तावेज बमोजिम आफ्ना गुनासोहरु दर्ता गर्न र सोही दस्तावेजमा भनिए बमोजिम गुनासोको समाधान हुने व्यहोरा सम्पूर्ण सरोकारवालाहरुलाई जानकारी गराइन्छ।

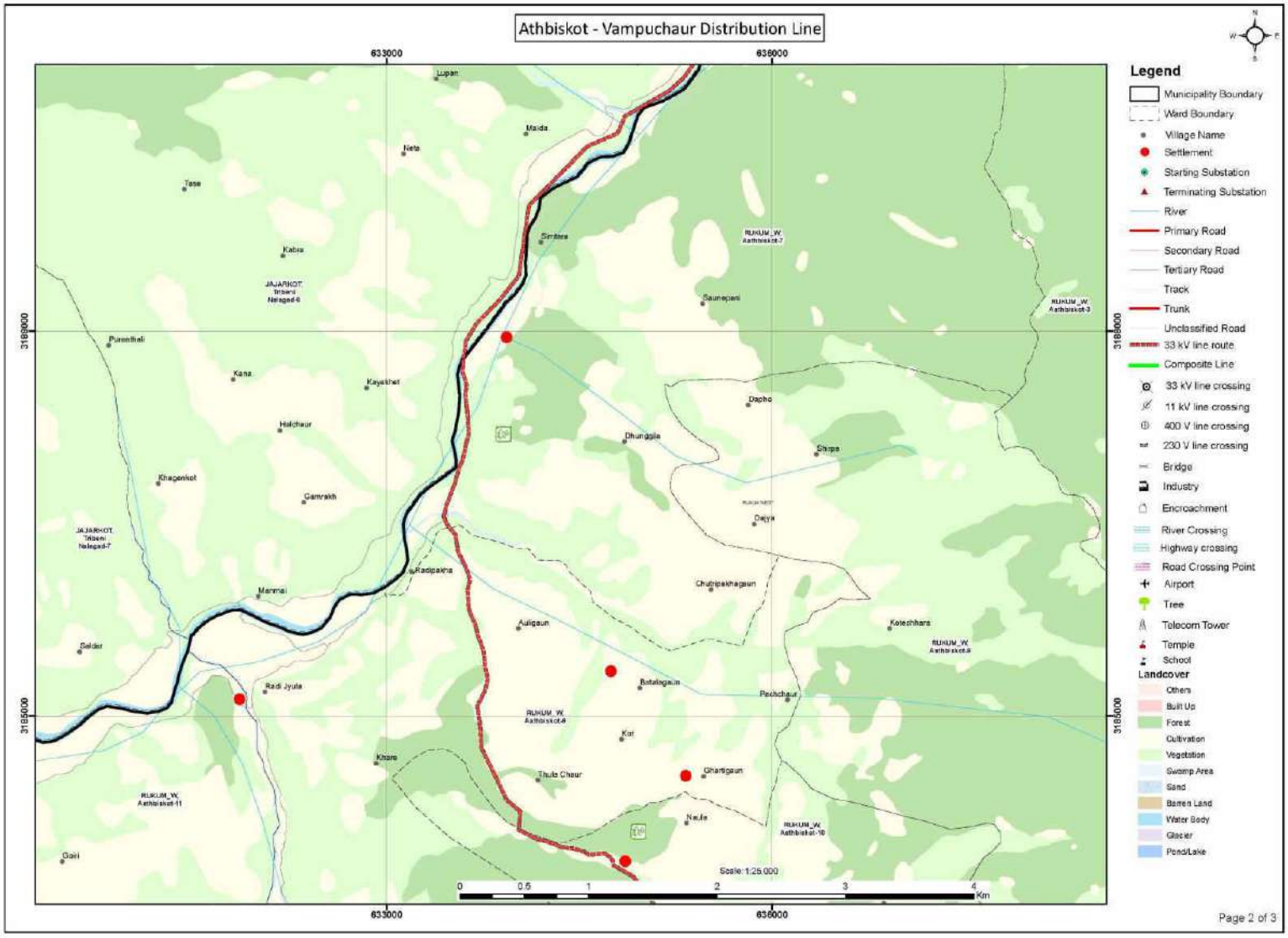
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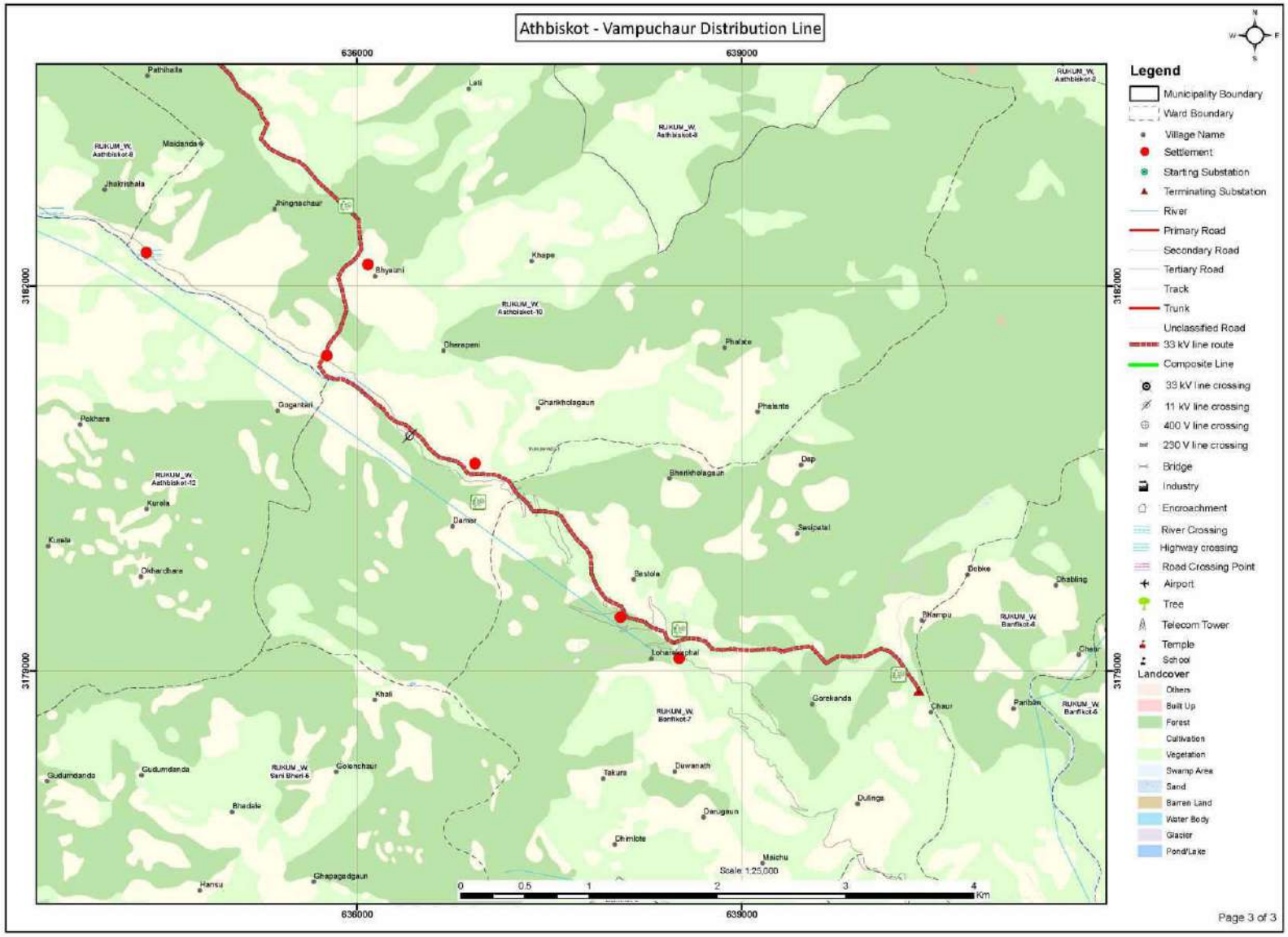
(केशव श्रेष्ठ)
आयोजना प्रमुख

Annex 2: LAYOUT MAPS OF SUBSTATION AND DISTRIBUTION LINE ALIGNMENT




Athbiskot - Vampuchaur Distribution Line
638000
639000
642000
3194000
3191000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Starting Substation
Terminating Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
33 kV line route
Composite Line
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
Tree
Telecom Tower
Temple
School
Landcover
Others
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Chaukha
Roli
Chhoyaro
Beyelle
Dhura
Ragda
Sharangga
Neyadanda
Chiuntjara
Dulagaun
Kalajura
Mukuwa
Gara
Scale: 1:25,000
0 0.5 1 2 3 4 Km
Page 1 of 3


Athbiskot - Vampuchaur Distribution Line
633000
636000
3189000
3185000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Starting Substation
Terminating Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
33 kV line route
Composite Line
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
Industry
Encroachment
River Crossing
Highway crossing
Road Crossing Point
Airport
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Telecom Tower
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Landcover
Others
Built Up
Forest
Cultivation
Vegetation
Swamp Area
Sand
Barren Land
Water Body
Glacier
Pond/Lake
Scale:1:25,000
0 0.5 1 2 3 4 Km
Page 2 of 3


Athbiskot - Vampuchaur Distribution Line
636000
639000
3182000
3179000
Legend
Municipality Boundary
Ward Boundary
Village Name
Settlement
Starting Substation
Terminating Substation
River
Primary Road
Secondary Road
Tertiary Road
Track
Trunk
Unclassified Road
33 kV line route
Composite Line
33 kV line crossing
11 kV line crossing
400 V line crossing
230 V line crossing
Bridge
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Sand
Barren Land
Water Body
Glacier
Pond/Lake
Scale 1:25,000
0 0.5 1 2 3 4 Km
Page 3 of 3

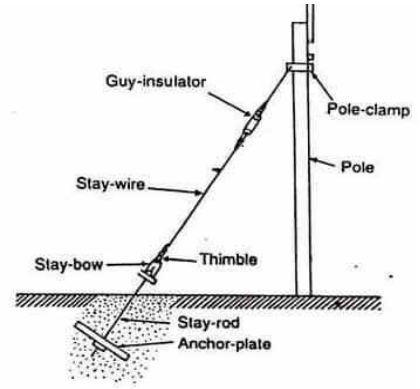
Annex 3: FACILITY AND COMPONENTS



Transformer



Switch Yard



Stay/Guy Sets



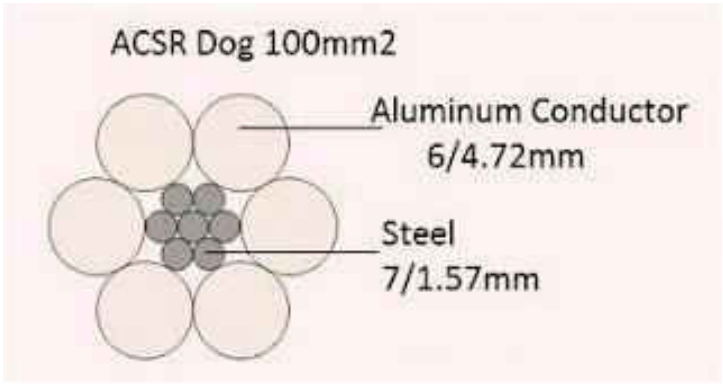
Steel Tubular Pole



Insulator

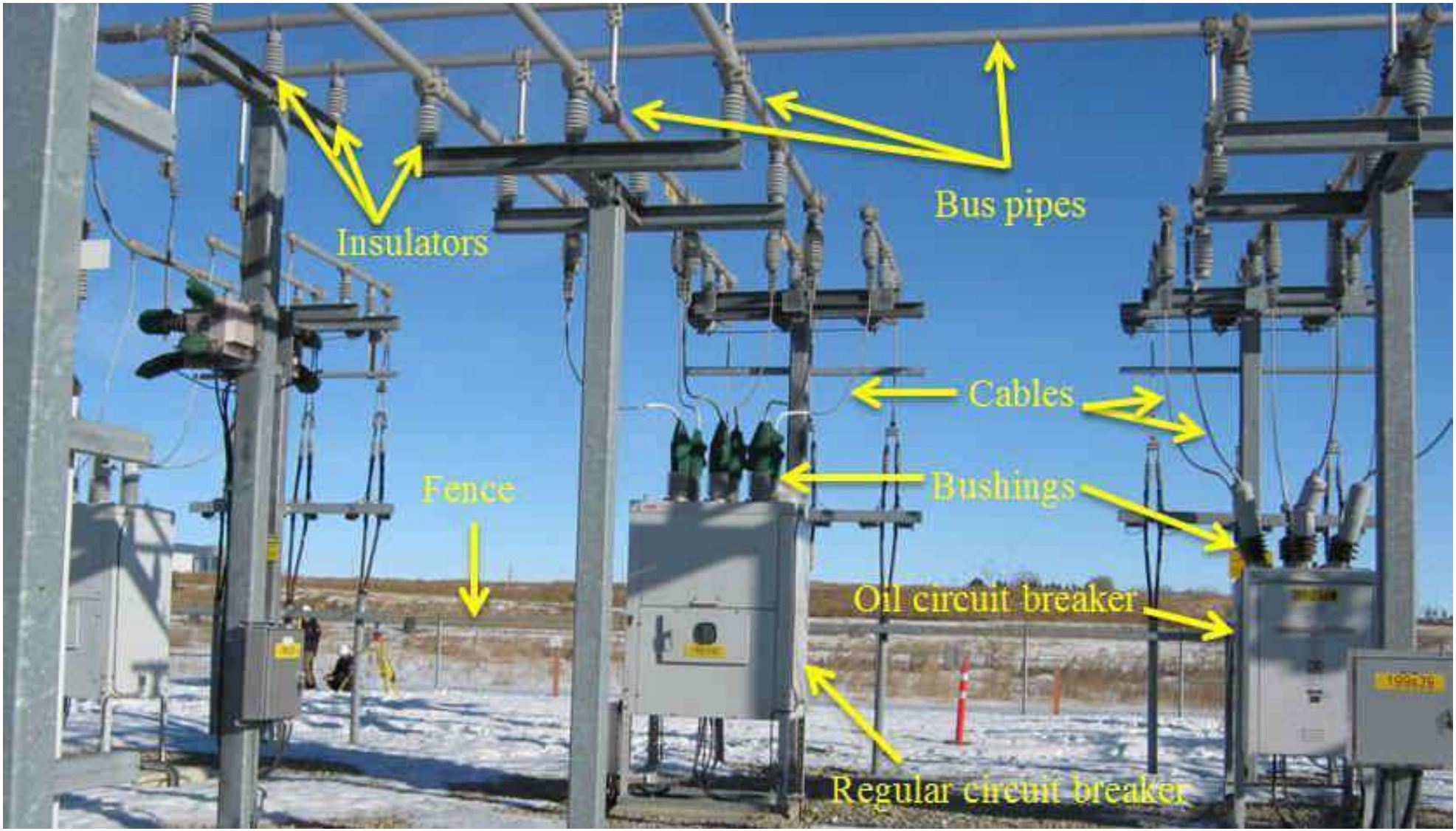


Civil-Structures Supporting Electrical Components





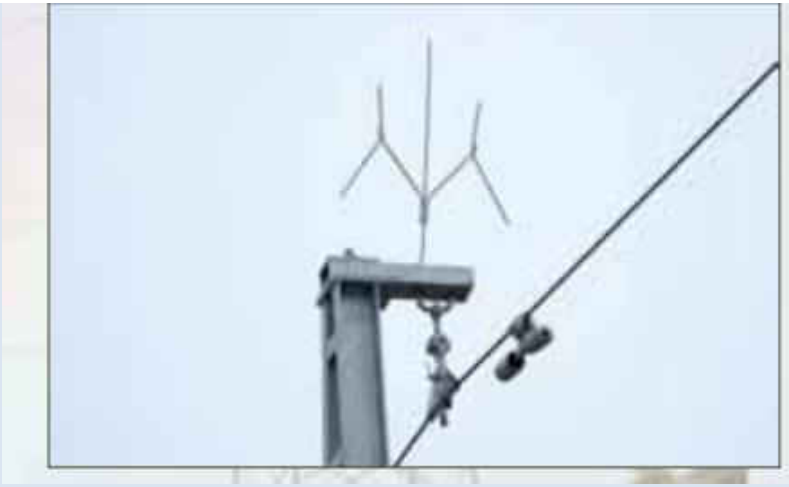
Conductor


Insulators
Bus pipes
Cables
Fence
Bushings
Oil circuit breaker
Regular circuit breaker

Possible components within 33 kV/11 kV Substation



Bird Diverting Reflector



Wishbone Prevents Bird Landing on Wire



White Spiral in Wire Improves Visibility of Wire



Construction of Nest at Poles also divert Brid not sitting at Wires

Annex 4: LEGISLATIVE PROVISIONS

SN	Legal Provisions	Description	Relevancy concerning Project
1.	**Constitution of Nepal**	● The Constitution of Nepal is the main legal document, which emphasizes the right to a clean environment of the people, natural resources protection, preservation, and its prudent use. Rights regarding the clean environment, under article 30: ● It includes making multi-purpose development of water resources, while according priority to domestic investment based on public participation to ensure a reliable supply of energy affordably, and easily, and make proper use of energy for the fulfillment of the basic needs of citizens, by generating, and developing renewable energy in article 51 (g).	DSUEP helps to fulfill the rights of people to live in a clean environment along with fulfilling the basic needs by providing access to sufficient energy.
2.	**Environment Protection Act 2076 (2019 AD)**	● Section 3 of the Act requires the proponent to conduct environmental studies concerning the prescribed proposals of any developmental works. Subsection 2 of this act provides the framework for the environmental study report prepared according to sub-section (1) shall, in fulfillment of the process as prescribed, be submitted to the relevant bodies of the Government of Nepal for approval.	Environmental Studies, and approval of the report from the authorized body before construction of any project is mandatory to minimize the negative impacts in Nepal which is addressed in EPA, 2076.
3.	**Environmental Protection Rule, 2077 (2020 AD) [First Amendment on 2078 (2021)]**	● Under the Environmental Protection Rules (2020) first amendment (2021), rule (3) as mentioned in annex (1), Section (F) (Energy, Water Resources, and Irrigation Sector) sub-section (1), a proponent shall be required to carry out the Brief Environmental Studies for construction of transmission line project less than 66 kV in forest land for another purpose.	This rule provides the overall guidance to what type of environmental studies is required according to the project by the Government of Nepal.
		● Pertaining to Rule 3(1), Environment Protection Act (EPA), 2019 describes to complete Environmental Studies as per Schedule 1(Cha) Energy, water resources and irrigation sector (1)	The proposed Subproject will use the of Khaireni Churi Community

		under Environment Protection Regulation 2020 (First Amendment in 2021/05/24 on Nepal Gazette) state "use of forest area for the electricity distribution line project up to 66 KV"	Forest (CF), Kaina Patal CF, Rani Ban CF, Salleri CF, Bagi Mela CF, Ghari Vir CF, Tin Kholi CF, and Vampu Patal CF land for the purpose of 33 kV distribution line extension and substation construction. For which, BES is mandatory.
4.	**Nepal Environmental Policy, and Action Plan, 2050(1993)**	The aims of NEPAP are: ● To manage natural, and physical resources efficiently, and sustainably ● To balance the development efforts, and environmental conservation for sustainable fulfillment of basic needs ● To preserve endemic, and endangered species, and their habitats; the promotion of private, and public institutions for biological resources inventory, and conservation ● To safeguard national heritage ● To mitigate the adverse environmental impact of development projects, and human actions ● To integrate environment, and development through appropriate institutions, adequate legislation, and economic incentives, and sufficient public resources	DSUEP should follow the aims of NEPAP to protect, and conserve the physical, biological, and social environment during the construction of a 33 kV distribution line along with a substation.
5.	**Forest Act 2076 (2019)**	• Pertaining to the chapter 12, Section 42(1), if there is no other alternative to the using of forest area for the operation of a national priority project, plan of which investment is approved by the Investment Board, project of national pride and it appears from the environment examination referred to in the prevailing law that the operation of such plan does not result in significant adverse effects on the environment, the Government of Nepal may give approval, as prescribed, to use any part of the national forest for the purpose of operating such plan, • Similarly, In providing the forest area for the operation of a plan pursuant to sub-section (1), to the extent possible, a land that is adjoining to the	• About 3.81 ha of forest area occurs within RoW of the proposed 33 kV distribution line • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 856

		national forest area near the project site and situated in the same geographical and ecological belt and has such landscape where forest can be developed shall be provided for the purpose of planting trees at least in the area equal to the forest area that has to be used.	
6.	**Work Policy with the Guideline of National Forest Land Area to be Use for National Priority Plan, 2076 (2019)**	• Pertaining to Section 4 (1), environmental study report should be prepared if the project needs the use of national forest area, • Section 7 require the approval of Government of Nepal, for the use of forest on the implementation of project • Section 17 (3) require plantation of trees in the ratio of 1:10 in the area given by the concerned forest office as a compensation for the removal trees during the project implementation Section 17 (4) require care, maintenance and upkeep of the planted trees and handover to concerned forest office after 5 years.	• About 3.81 ha of forest area occurs within RoW of the proposed 33 kV distribution line • Estimated number of trees that need to be cleared from the Core Project Area of the proposed DL alignment are 856
7.	**Electricity Act 1992**	● No person shall be entitled to conduct survey, generation, transmission, or distribution of electricity without obtaining a license under this act. ● The Electricity Act of 1992 has the provision of land procurement for the development of Subprojects that involve electricity generation, transmission, or distribution. The Act states that the licensee may apply to GoN to purchase the land or house of any person if it is required for the generation, transmission, or distribution of electricity. Upon the receipt of such an application, GoN may make the land or house, so requisitioned, available to any corporate body under the prevailing laws.	The main goal of this project is to distribute a sufficient amount of electricity by constructing a 33kV line, and substation by surveying to minimize the impacts.
8.	**Rural Energy Policy, 2006**	The rationale of formulating, and implementing this policy is to create a conducive environment that will self-motivate, and mobilize local institutions, rural energy user groups, non-government organizations, cooperatives, and private sector organizations for the development, and expansion of rural energy resources. The government will facilitate, and promote to involve private	This project helps to improve the distribution, and motivate use the of electricity in rural areas of western Nepal.

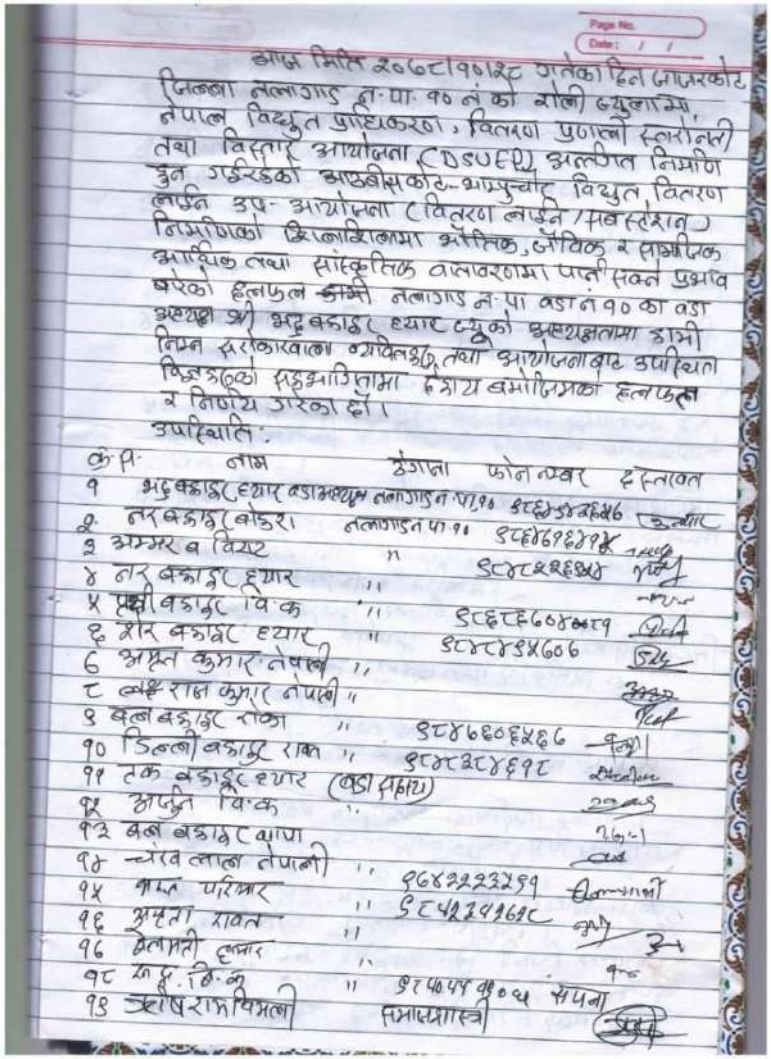
		development, and expansion of new technologies. It has also envisioned subsidy provision for the promotion of such renewable energy technologies.	
9.	**Labor Act, 2074 (2017 AD)**	This labor Act was made under the management of parliament under sub-clause 1 of clause 296 of the Constitution of Nepal. Sub-section 3 of Section 2 states that the employees should not be compelled to other work other than they are assigned for. In addition, Sub-section 5 of Section 2 states about the prohibition of child labor in any organization, and sub-section 6 of Section 2 states that there should not be any kind of discrimination among the employee's regard of religion, ethnicity, gender, origin, language, or intelligence or other kinds of characters.	The construction of a project is only possible when the rights of labor are secure. In this project, the Contractor should follow this act strictly.
10.	**Child Labor (Prohibition, and Regulation) Act, 2056 (2000 AD)**	As per section 3 of this act, no child has not attained the age of 14 years shall be engaged in works as a laborer.	Child labor is strictly prohibited in this project, and Contractors should follow this act.
11.	**Solid Waste Management Act, 2068 (2011 AD)**	This act has been formulated to minimize solid waste products from the target area by setting rules, and regulations on solid waste management (SWM) in the country to develop a better environment for the systematic, and effective management of solid waste, and to involve all the concerned stakeholders in SWM practice. The main features of this act are the discussion of the 3R principle (Reduce, Reuse, and Recycle). 3R principle seems to be very beneficial as it not only increases the life of landfill site but also saves the money which could be used for other infrastructure development. Section 4 of the act assigns the local body to manage or use the solid waste discharged or dumped in the collection center, transfer station, or treatment plant or collected during cleaning.	These acts provide the overall framework to manage the solid waste generated from households to the project level. Also, the proponent should manage the waste generated during construction.
12.	**Solid Waste Management Rules, 2070 (2013 AD)**	The solid waste management rule was formulated as per the provision made in article 50 of the Solid Waste Management Act, 2068. This regulation has emphasized the segregation of waste at source, and mentioned that the responsibility of proper disposal, and management of source belongs to	These rules provide the overall framework for how to reduce the volume of waste disposed of at the

		the producers themselves. Section 3 of the rule describes the segregation, and management of solid waste. It has been mentioned that it is essential to segregate degradable, and non-degradable solid waste at the source.	source during the construction of the substation.
13.	**Fifteenth Plan**	The vision of the 15th plan is to contribute to the prosperity of the nation through sustainable, and reliable development of hydropower by setting the goal which is to ensure energy security through intensifying hydropower generation. In addition, one of the strategies of the government of Nepal in the 15th plan is to make the distribution system effective, and reliable to increase energy efficiency, and increase power consumption by expanding access to electricity by formulating the required policies:	This 5-year interim plan sets the goal about the generation, and distribution of hydroelectricity in Nepal which is directly related to this project.
14.	**United Nations Framework Convention on Climate Change (UNFCCC), 1992**	UNFCCC, Signatories: 165. Parties: 195. (1), Article (4), commitment (f) states climate change considerations into account, to the extent feasible, in their relevant social, economic, and environmental policies, and actions, and employ appropriate methods, for example, impact assessments, formulated, and determined nationally, to minimize adverse effects on the economy, on public health, and the quality of the environment, of Subprojects or measures undertaken by them to mitigate or adapt to climate change. After it entered into force on 21 March 1994, it mandates the individual state for prioritization of resource conservation with development.	The goal of this project is to replace the traditional form of energy with clean energy i.e. electricity which ultimately reduces air pollution, and smoke.
15.	**ILO 169**	The main objective of this convention is to secure the rights of indigenous, and tribal people along with the gender equality, and non-discrimination of workers during work. Article 1 on the First Part of this convention mainly focused on the following points: (a) the social, cultural, and economic conditions of tribal peoples in independent countries differentiate from other parts of the national community, and their status is managed fully or partially by their customs or traditions or by special laws or regulations;	Nepal is the part of ILO convention that's why ILO 169 should strictly follow during construction, and implementation of any types

		(b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries, and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions. ● Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply. ● The use of the term people in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law.	
16.	**Environment and Social Management Framework**	● ESMF is to guide DSUEP sub-projects in the area of E&S management using appropriate instruments, methodologies, procedure and responsibilities during the project cycle. NEA and the project partners shall apply during design and development of the sub-projects in order to comply with the Government of Nepal E&S regulations and the Financiers' standards on E&S assessment and management, Involuntary Resettlement, Indigenous People, Gender, etc.).	Main guiding document for E&S study to identify issues and recommending appropriate practical augmentation/ mitigation measures
17.	**Environmental and Social Policy (ESP)**	● This policy speaks for the mandatory E&S requirements for each Project like, screening, DDR, E&S Assessment, ESMP, ESMF, Information Disclosure, Consultation and Monitoring and Evaluation.	Mandatory requirement for ESMP study
18.	**Environmental and Social Standards of AIIB** [12]	● Three associated mandatory environmental and social standards (ESSs) set out more detailed environmental and social requirements relating to the ESMP	ESMP requirement

[12] *https://www.aiib.org/en/policiesstrategies/download/environmentframework/20160226043633542.pdf*

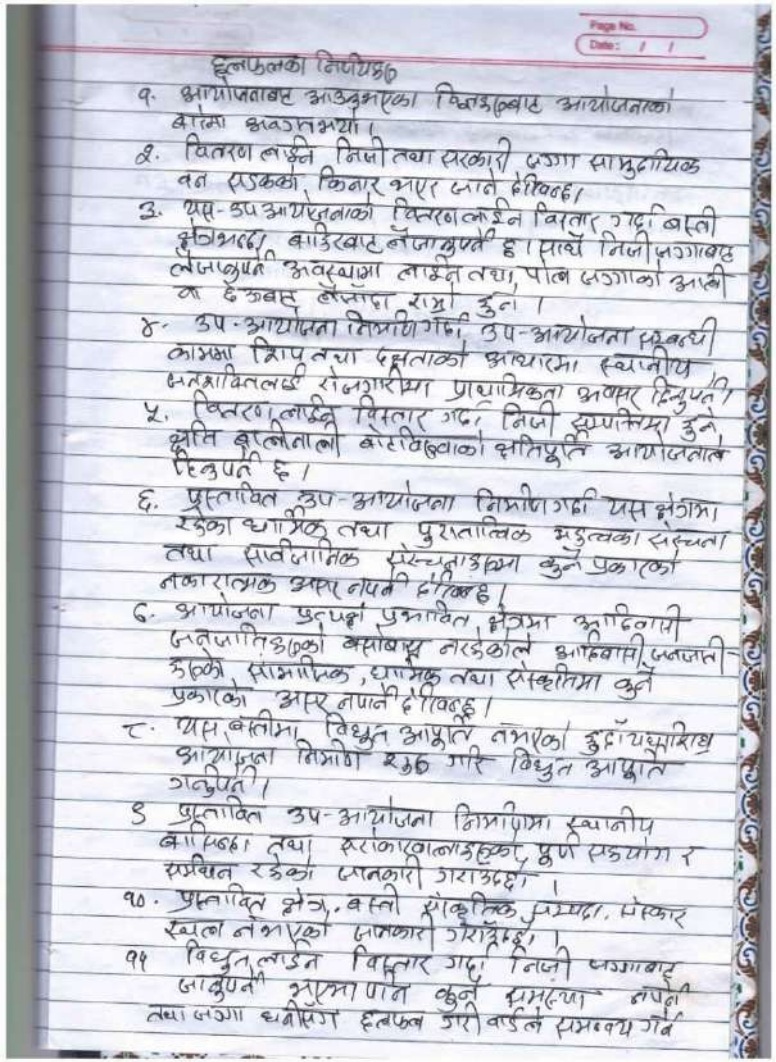
Annex 5: CONSULATATION MEETING MINUTES



वाह्न मिति २०७८।१०।२८ गतेका दिन जोरसंकोट
जिल्ला तत्लागाउ न.पा. ९० नं को रोली ऊर्जालय,
नेपाल विद्युत प्राधिकरण, वितरण पुनर्लो स्तरोन्नती
तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण
हुने गर्डिएको आठबिसकोट-भाम्पुचौर विद्युत वितरण
लाईन उप- आयोजना (वितरण लाईन / सवस्टेशन)
निर्माणको क्रियाकलापमा आर्थिक, जैविक र सामाजिक
आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सक्ने प्रभाव
बारेको हलफल गर्न तत्लागाउ न.पा वडा नं ९० का वडा
अध्यक्ष श्री भद्रु बडाढ्र ज्यार ज्यूको अध्यक्षतामा तथा
निम्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबाट उपस्थित
विज्ञहरुको सहभागितामा केहाय बमोजिमका हलफल
र निर्णय गरेका हौं।

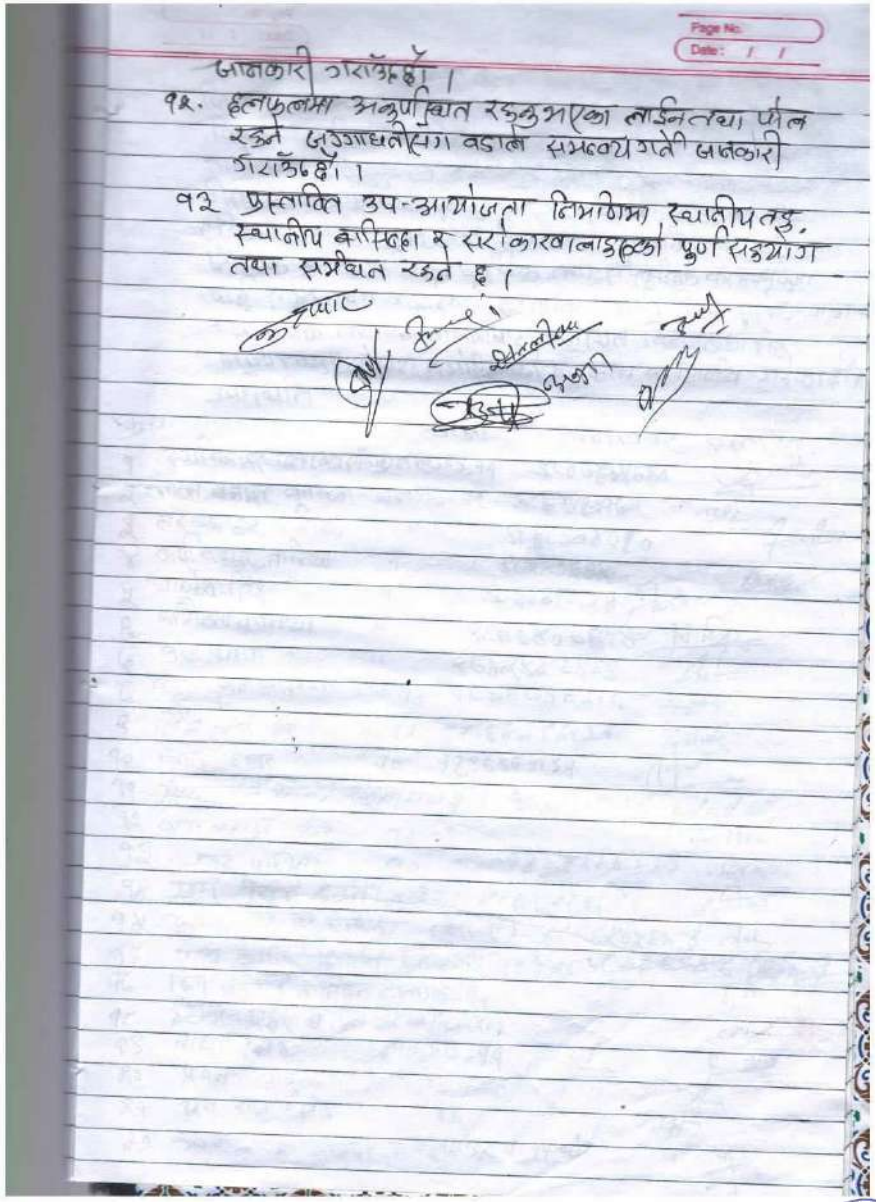
उपस्थिति:

क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	भद्रु बडाढ्र ज्यार	वडाअध्यक्ष तत्लागाउ न.पा.१०	९८६४३६६४४६	
२	नर बडाढ्र बोहरा	तत्लागाउ न.पा.१०	९८६४७१६४१४	
३	अम्मर ब विश्व	"	९८४८२१६४४३	
४	नर बडाढ्र ज्यार	"		
५	पक्षी बडाढ्र वि.क	"	९८६८६६०४८८१	
६	वीर बडाढ्र ज्यार	"	९८४८४३४६०६	
७	अमृत कुमार नेपाली	"		
८	बहादुर राज कुमार नेपाली	"		
९	बल बडाढ्र राका	"	९८४६८०६४६६	
१०	डिल्ली बडाढ्र राक	"	९८४८३८४६१८	
११	दल बडाढ्र ज्यार (बडा सदस्य)			
१२	अर्जुन वि.क	"		
१३	बल बडाढ्र थापा	"		
१४	चरव लाल नेपाली	"	९८४२२२३२४१	
१५	कामल परियार	"	९८५२२५१६१८	
१६	अमृता रावत	"		
१७	बेलायती कुमार	"		
१८	क.मु.वि.स	"	९८५०५४ ७९०५	सपना
१९	जोषराज विश्वली	तिमालस्ताल		



हलफलको निर्णयहरु

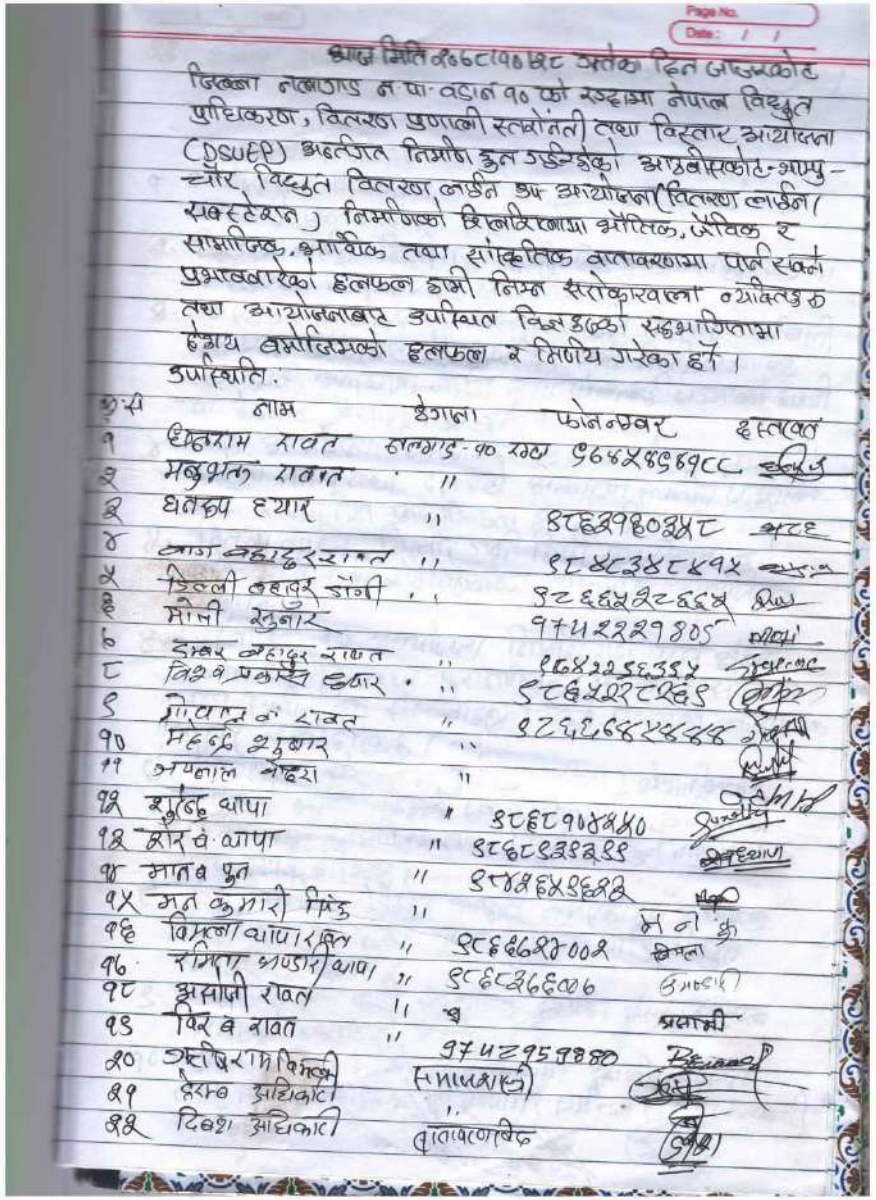
१. आयोजनाबाट आउने असरको न्यूनीकरण आयोजनाको बारेमा अवगत गराउने।
२. वितरण लाईन निजी तथा सरकारी जग्गा सामुदायिक वन सडकको किनार भएर जाने देखिन्छ।
३. उप-उप आयोजनाको वितरण लाईन वितार गर्दा बस्ती नछिचर्ने, बाडिबार नजाकुपर्ने हुँदा यसमा निजी जग्गाबाट नजाकुने अवस्थामा लाईन तथा पोल जग्गाको आसपासको हकवस्त हेरेर राख्नु हुने।
४. उप-आयोजना तिर्माण गर्दा, उप-आयोजना सम्बन्धी कामका लिपु तथा दक्षताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।
५. वितरण लाईन वितार गर्दा निजी सम्पत्तिमा हुने क्षति बापतको क्षतिपूर्ति आयोजनाले दिनुपर्ने हुन।
६. प्रस्तावित उप-आयोजना तिर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वका संरचना तथा सार्वजनिक संरचनाहरुमा कुन प्रकारको नकारात्मक असर नपर्ने देखिन्छ।
७. आयोजना प्रत्यक्ष प्रभावित क्षेत्रमा आदिवासी जनजातिहरुको बसोबास नरहेकोले आदिवासी जनजाती हरुको सामाजिक, धार्मिक तथा सांस्कृतिमा कुनै प्रकारको असर नपर्ने देखिन्छ।
८. यस क्षेत्रमा विद्युत आपूर्ति नभएको हुँदा यस क्षेत्रमा आयोजना तिर्माण भए विद्युत आपूर्ति गर्नुपर्ने।
९. प्रस्तावित उप-आयोजना तिर्माणमा स्थानीय बासिन्दा तथा सरोकारवालाहरुको पूर्ण सहयोग र समन्वय रहेको जानकारी गराउने।
१०. प्रस्तावित क्षेत्र, बस्ती सांस्कृतिक प्रथाहरु, संस्कार स्थल नभएको जानकारी गराईने।
११ विद्युत लाईन वितार गर्दा निजी जग्गाबाट जाकुने भएमा पोल कुने हकमुक्त नपर्ने तथा जग्गा धनीसंग हलफब गरी बाईने समन्वय गर्ने



जानकारी गराउँदछौं ।

१२. हलफलमा अनुपस्थित रहनुभएका लाईनम्यान तथा फील्ड रहने जुगाधनेसँग वडाले समन्वय गर्ने जानकारी गराउँदछौं ।

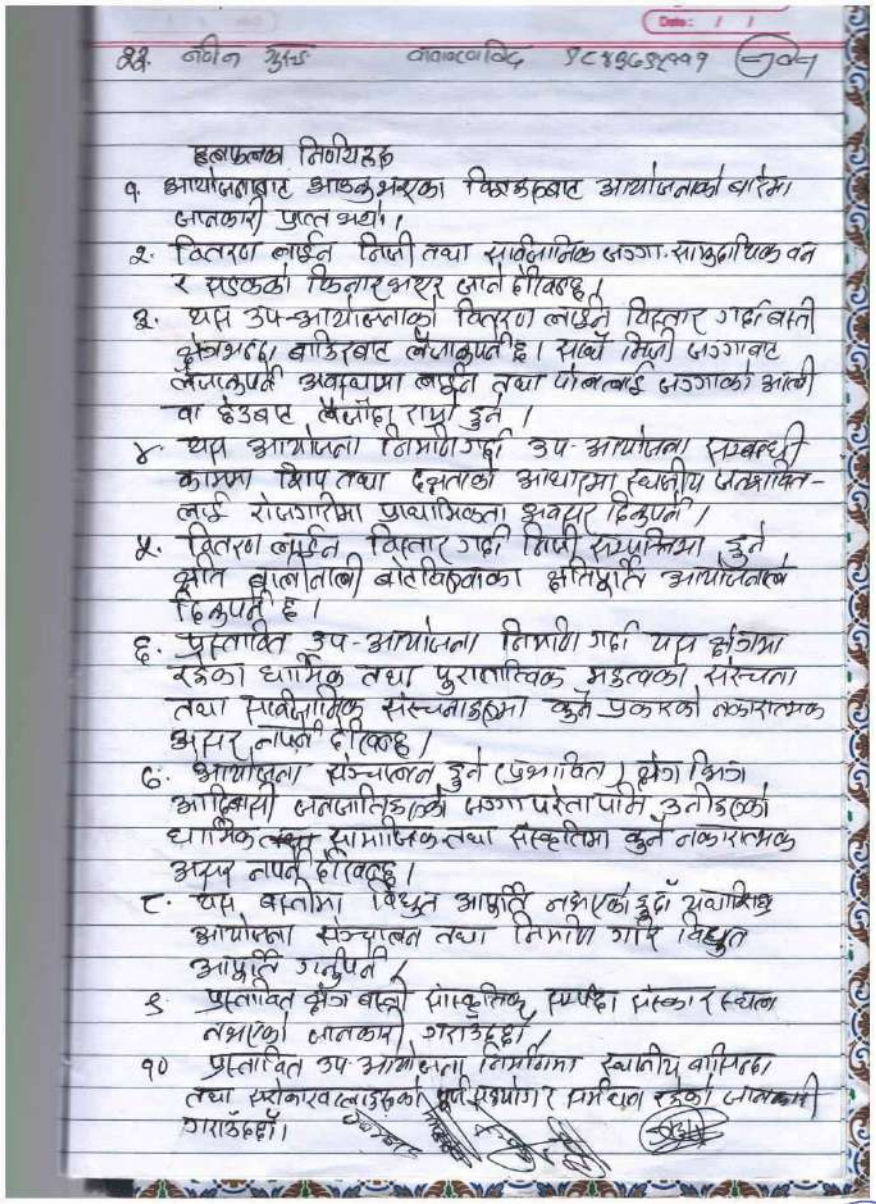
१३ प्रस्तावित उप-आयोजना निर्माणमा स्थानीयस्तर, स्थानीय बासिन्दा र सरोकारवालाहरुको पूर्ण सहयोग तथा समन्वयन रहने छ ।



आज मिति २०८८।०५।१८ गतेका दिन अठबिसकोट जिल्ला तत्लागाउ न.पा. वडा नं १० को सदरमा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अर्न्तगत निर्माण हुन गईरहेको अठबिसकोट-भाम्पु-चौर विद्युत वितरण लाईन अप आयोजना (वितरण लाईना सवस्टेशन) निर्माणको क्रियाकलापमा भौतिक, जैविक र सामाजिक, आर्थिक तथा सांस्कृतिक वातावरणमा पर्ने सक्ने प्रभावहरुको हलफल गर्नु निम्न सरोकारवाला व्यक्तिहरु तथा आयोजनाबारे उपस्थित विज्ञहरुको सहभागितामा हाम्रो वस्तिमाको हलफल र मिलेय गरेका हौं ।

उपस्थिति:

क्र.सं	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	धिरुराम रावत	तत्लागाउ-१० सदर	९७४२४९४१८८	
२	मनुभक्त रावत	"		
३	धनरुप हयार	"	९८६२९४०३५८	
४	लाल बहादुर रावत	"	९८४८३४८४९५	
५	दिल्ली बहादुर डाँगी	"	९८६६५२८६६५	
६	मोनी सुनार		९७४२२२९४०५	
७	दलबर बहादुर रावत	"	९८४२२५६३५५	
८	विश्व प्रकाश हयार	"	९८६५२२८२६९	
९	गोपाल सिं रावत	"	९८६८६४५५४४	
१०	महेन्द्र कुमार	"		
११	अपहाल बोहरा	"		
१२	शुरेन्द्र थापा	"	९८६८१०४४५०	
१३	सरिन थापा	"	९८६८३३३२९९	
१४	माता पुत	"	९८४४६५९६२२	
१५	मन कुमारी सिंह	"		
१६	विमला थापा/रक्षित	"	९८६४८२४००२	
१७	रमिता भण्डारी/थापा	"	९८६८२६६००६	
१८	अमाजी रावत	"		
१९	धिरु बं रावत	"		
२०	धनबिराम विश्वकर्मा	"	९७४२९५१४४०	
२१	वडा अधिकारी	तत्लागाउ		
२२	विज्ञ अधिकारी	वातावरणविद		



हस्ताक्षरका निर्णयहरू

१. आयोजनाबारे आजकै भरमा विस्तृतमा आयोजनाको बारेमा जानकारी प्रस्तुत गर्ने।

२. वितरण लाईन निर्माण तथा सार्वजनिक जग्गा, सार्वजनिक वन र सडकको छिनारभएर जाने हुँदा।

३. यस उप-आयोजनाको वितरण लाईन वितार गर्दा बाटो खुल्ने भएकाले बाटोबाट जोड्नुपर्ने अवस्थामा जग्गा तथा पोलसम्म जग्गाको आली वा डेउबाट जोड्नुपर्ने राय दिने।

४. यस आयोजना निर्माण गर्दा उप-आयोजना सम्बन्धी कामका लागि तथा दैनिकको आधारमा स्थानीय जनशक्ति-लाई रोजगारीमा प्राथमिकता अवसर दिनुपर्ने।

५. वितरण लाईन वितार गर्दा बिजुली सम्पर्कमा हुने, मृत भएमानवी बोटविरुवाको क्षतिपूर्ति आयोजनाले दिनुपर्ने।

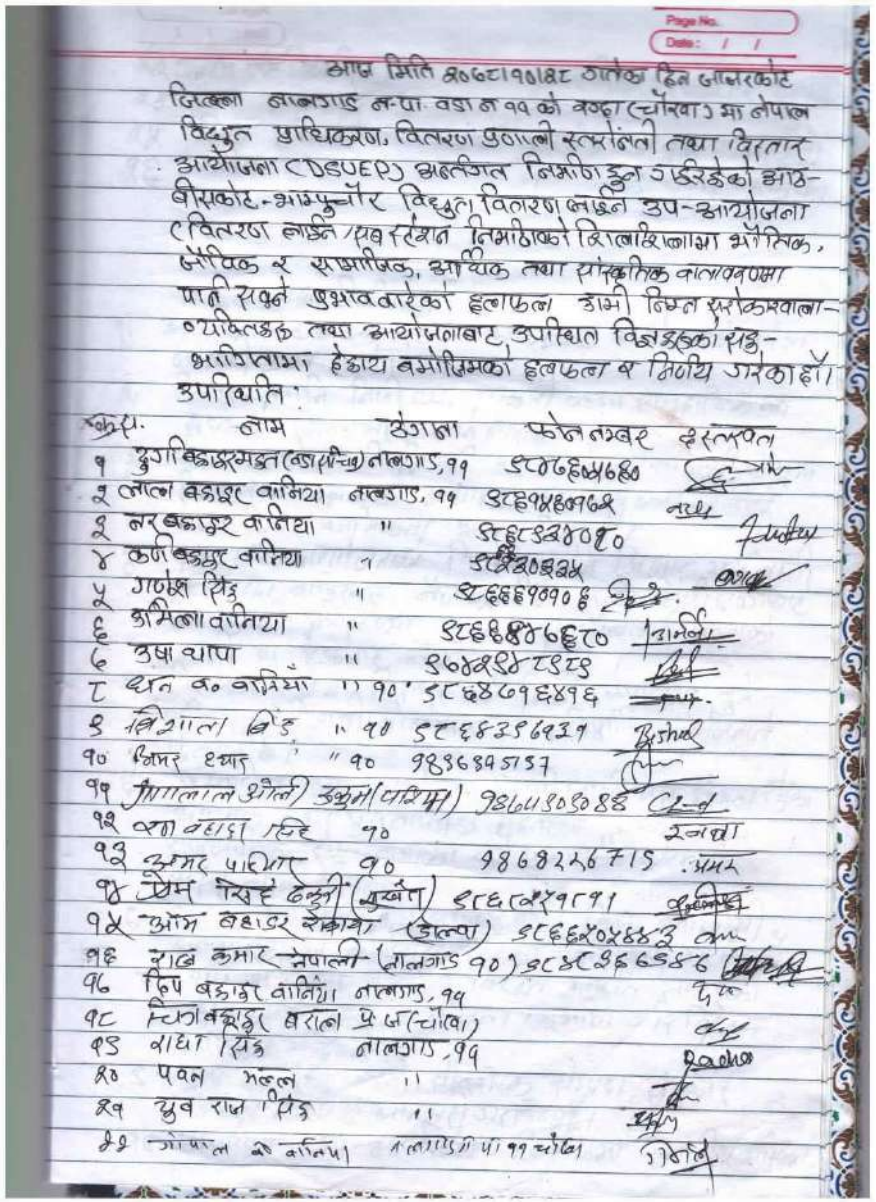
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक महत्वको संरचना तथा सार्वजनिक संरचनालाई कुनै प्रकारको नकारात्मक असर नपर्ने देखिन्छ।

७. आयोजना संचालन हुने प्रभावित क्षेत्र भित्र आदिवासी जनजातिहरूको जग्गा परेतापनि उनीहरूको धार्मिक तथा सामाजिक तथा संस्कृतिमा कुनै नकारात्मक असर नपर्ने देखिन्छ।

८. यस क्षेत्रमा विद्युत आपूर्ति नभएकाले हुँदा प्रस्तावित आयोजना संचालन तथा निर्माण गरि विद्युत आपूर्ति गर्नुपर्ने।

९. प्रस्तावित क्षेत्र भित्र सांस्कृतिक धार्मिक संस्कार स्थान नभएको जानकारी गराउने।

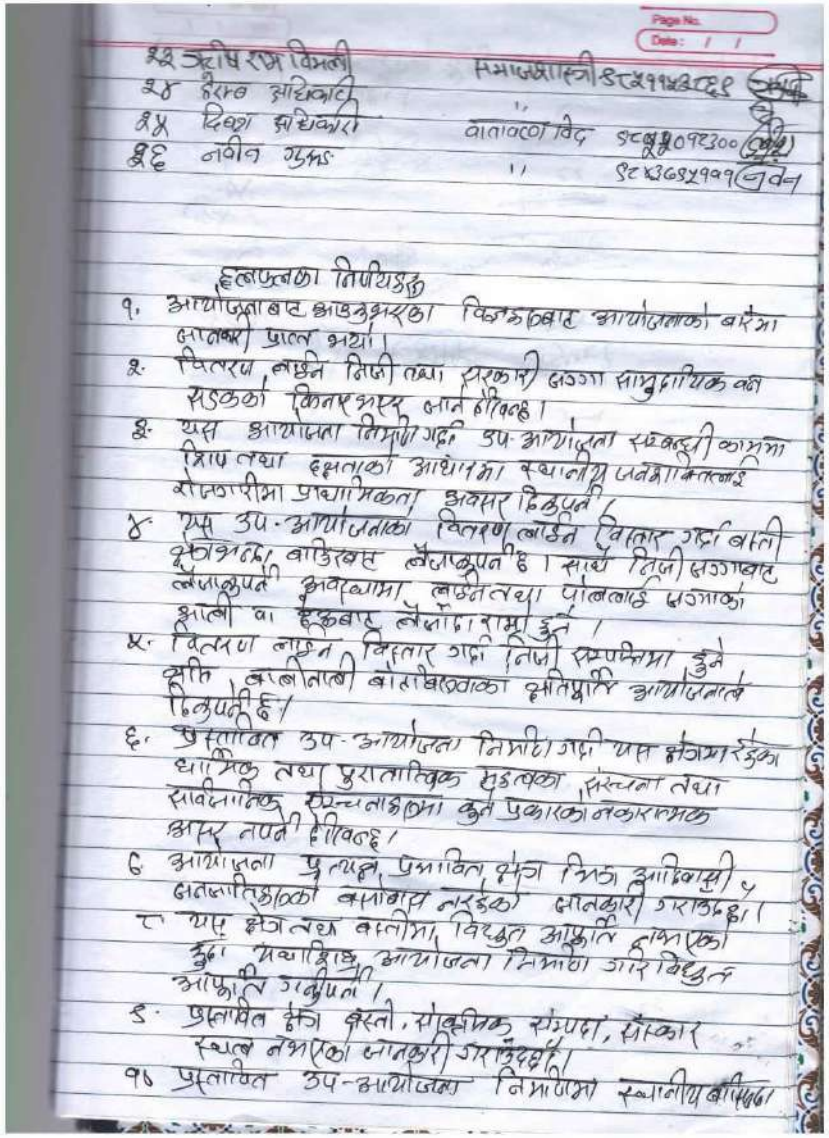
१०. प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा तथा स्वेच्छासेवकहरूको पूर्ण सहयोग र समन्वय रहने जानकारी गराउने।



आज मिति २०८८।१०।१८ गतेका दिन जानकोट दिक्तेल लालगाड न.पा. वडा न १५ को वडा चौतारा मा नेपाल विद्युत प्राधिकरण, वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना (DSUEP) अन्तर्गत निर्माण हुने ३३केभी को आठ-बीसकोट-आमपुचौर विद्युत वितरण लाईन उप-आयोजना (वितरण लाईन/सबस्टेशन निर्माणको सिलसिलामा भौतिक, जैविक र सामाजिक, आर्थिक तथा सांस्कृतिक वातावरणमा पार्न सक्ने प्रभाव तथा यसको हलफला डामी निम्न प्रस्तावना-प्रस्तुतकर्ता तथा आयोजनाबारे उपस्थित विज्ञहरुको राय-सुझावसमेत समावेश गरी यसमा हलफला र निर्णय गरिएको हो।

उपस्थिति:

क्र.सं.	नाम	ठेगाना	फोन नम्बर	हस्ताक्षर
१	डुगी बिक्रम सङ्गत (जोर्चा)	लालगाड, १५	९८४६६४५६४०	
२	लाल बहादुर वानिया	लालगाड, १५	९८६१४६०५८२	
३	नर बहादुर वानिया	"	९८६८३४४०६०	
४	कर्ण बहादुर वानिया	"	९८६३०९३४५	
५	गणेश रिङ	"	९८६६६१७१०६	
६	कमिला वानिया	"	९८६६४४४६६८०	
७	उषा थापा	"	९८४२९४८९८९	
८	धन ब० वानिया	" १०	९८६४०६१६४१६	
९	बिजुला रिङ	" १०	९८६४३६४३१	
१०	निदर थापा	" १०	९८३६४५७५७	
११	गोपालाल थैली	उकुमा (परिमा)	९८६५३०३०४४	
१२	रमा बहादुर रिङ	१०		
१३	कुमार पाण्डा	१०	९८६८२५६७१५	
१४	प्रेम सिंह हेन्नी	(सुर्खेत)	९८६८४२९८९१	
१५	ओम बहादुर सेकावा	(डोल्पा)	९८६६४०४४४३	
१६	राहुल कुमार नेपाली	(लालगाड १०)	९८४८३६६५४६	
१७	दिप बहादुर वानिया	लालगाड, १५		
१८	सिंगा बहादुर बराल	(जजरकोट)		
१९	राधा रिङ	लालगाड, १५		
२०	पवन मल्ल	"		
२१	युव राज रिङ	"		
२२	गोपाल को वानिया	लालगाड, वा.नं १५ चौतारा		

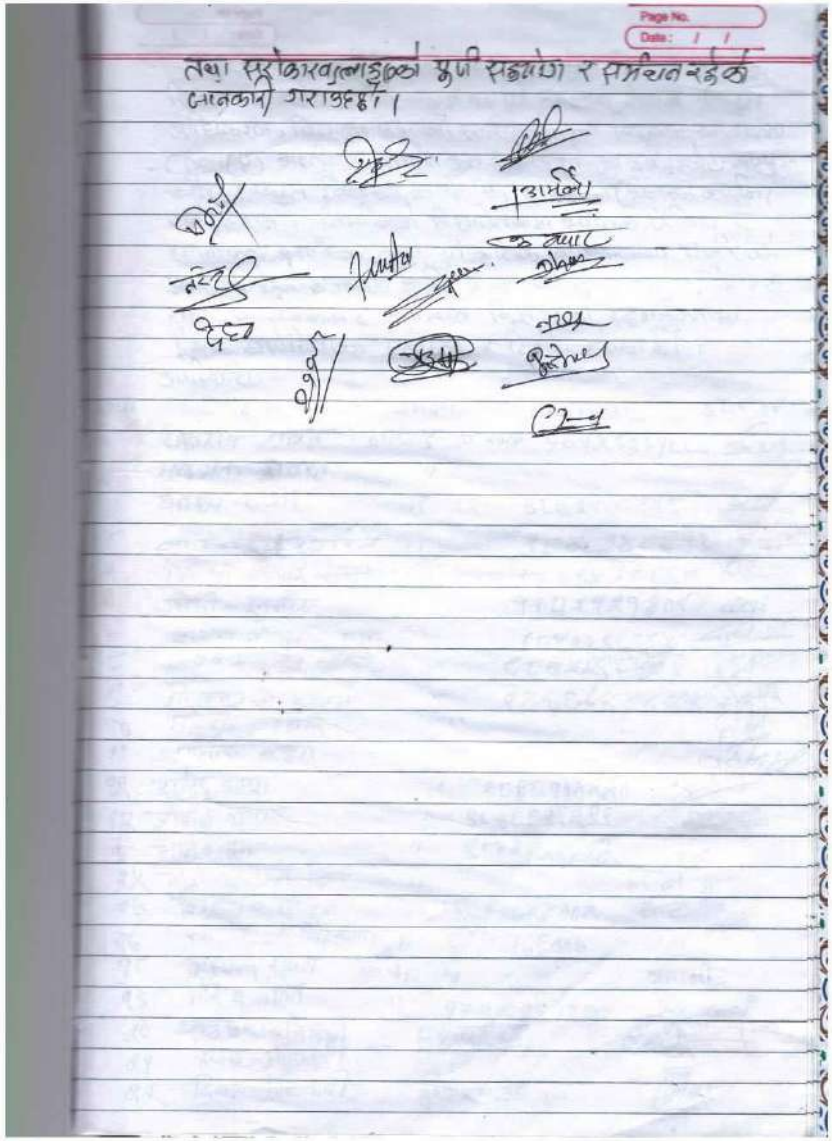


२३ उद्योग वाणिज्य विभाग
२४ वैरुन अधिकारी
२५ शिक्षा अधिकारी
२६ नवीन गुरुङ

समाजशास्त्री ९८४११४७८९९
,,
वातावरण विद ९८४५५०९२३००
,, ९८४७६४५१९१

हस्तक्षेपका विषयहरू

१. आयोजनाबाट आउनुअघिका विद्युतीकरण आयोजनाको बारेमा जानकारी प्राप्त भयो।
२. वितरण लाइन निजी तथा सरकारी जग्गा सार्वजनिक वन सडकको किनारहरूमा जान सक्छ।
३. यस आयोजना निर्माण गर्दा उप-आयोजना सञ्चालनको कारण श्रम तथा दक्षताको आधारमा स्थानीय जनशक्तिलाई रोजगारीमा प्राथमिकता अवसर दिइनुपर्ने।
४. यस उप-आयोजनाको वितरण लाइन वितार गर्दा बाली क्षतिग्रस्त, बाडिबस लैजानुपर्ने छ। साथै निजी जग्गाबाट लैजानुपर्ने अवस्थामा लाइन तथा पोलसाई जग्गाको धनी वा हकवाला लैजाँदा रामो हुने।
५. वितरण लाइन वितार गर्दा निजी सम्पत्तिमा हुने क्षति, बालीनाली बारीखेतको क्षतिपूर्ति आयोजनाले दिनुपर्ने हुन्छ।
६. प्रस्तावित उप-आयोजना निर्माण गर्दा यस क्षेत्रमा रहेका धार्मिक तथा पुरातात्विक सम्पदा संस्थान तथा सार्वजनिक संरचनाहरूमा कुन प्रकारको नकारात्मक असर पर्न सक्छ।
७ आयोजना प्रत्यक्ष प्रभावित क्षेत्र भित्र आदिवासी जनजातिहरूको बसोबास नरहेको जानकारी गराइयो।
८ यस क्षेत्र तथा बस्तीमा विद्युत आपूर्ति कस्तो हुने प्रस्तावित आयोजना निर्माण गरि विद्युत आपूर्ति गरिनुपर्ने।
९. प्रस्तावित क्षेत्र बस्ती, सांस्कृतिक संरचना, पोखरा स्थल नक्साको जानकारी गराइयो।
१० प्रस्तावित उप-आयोजना निर्माणमा स्थानीय बासिन्दा



तथा सरोकारवालाहरुको मुख्य सङ्गठन र संस्थान रहेको जानकारी गराइयो।

Annex 6: DEED OF ENQUIRY (MUCHULKAS)

आठविसकोट नगरपालिका

९ नं वडा कार्यालय

राडीज्यूला कोट रुकुम (पश्चिम)

कर्णाली प्रदेश, नेपाल

सम्पर्क नं.
९८६१३९५८२१
९८५७८६६३४८

पत्र संख्याः २०७८/७९ मितिः २०७८/११/०२

चलानी नः ११६

श्री नेपाल विद्युत प्राधिकरण ,
वितरण तथा ग्राहक सेवा निर्देशनालय ,
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना ,दरबारमार्ग काठमाडौँ नेपाल ।

विषयः जानकारी गराईएको सम्बन्धमा।

प्रस्तुत विषयमा एसियन इन्फ्रास्ट्रकचर बैंक लि.को आर्थिक सहयोग र त्यस कार्यालयको प्रस्तावनामा कार्यान्वयन हुन लागेको यस आठविसकोट न.पा वडा न. ९ हुदै वितरण हुने आठविसकोट भाम्पुचौर विद्युत वितरण लाईन प्रणाली कार्यान्वयन हुदा आयोजनाको वातावरणीय तथा सामाजिक प्रतिवेदन तयारीको छलफलमा यस वडा भित्र निर्माण हुने लाईन तथा पोल पर्ने जग्गा धनिहरु अनुपस्थित भएमा यस वडा कार्यालयले समन्वय गरिदिने व्यहोरा जानकारीको लागि अनुरोध छ।

तारक बहादुर शाही
वडा अध्यक्ष

"समृद्ध गाउँ शहरको रहर: स्वस्थ, सफा, सुशासनयुक्त, समन्यायीक र समाजवाद उन्मूख आठविसकोट नगर"
E-mail: aathbiskotmunward9@gmail.com

आठविसकोट नगरपालिका

९ नं वडा कार्यालय

राडीज्यूला, रुकुम (पश्चिम)

कर्णाली प्रदेश, नेपाल

सम्पर्क नं.
९८६१३९५८२१
९८५७८६६३४८

पत्र संख्याः २०७८/७९ मितिः २०७८/११/०२

चलानी नः५०६५

श्री नेपाल विद्युत प्राधिकरण ,
वितरण तथा ग्राहक सेवा निर्देशनालय ,
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना ,दरबारमार्ग काठमाडौँ नेपाल ।

विषयः जानकारी गराईएको सम्बन्धमा।

प्रस्तुत विषयमा एसियन इन्फ्रास्ट्रकचर बैँक लि.को आर्थिक सहयोग र त्यस कार्यालयको प्रस्तावनामा कार्यान्वयन हुन लागेको यस आठविसकोट न.पा वडा न. ९ हुदै वितरण हुने आठविसकोट भाम्पुचौर विद्युत वितरण लाईन प्रणाली कार्यान्वयन हुदा यस वडामा आदीबासी जनाजातीको बसोबास नभएकाले आदिबासी जनाजातीको परम्परा रहन सहन आदिमा कुनै पनि नकरात्मक असर नपर्ने व्यहोरा जानकारीको लागि अनुरोध छ।

तारक बहादुर शाही
वडा अध्यक्ष

आठविसकोट नगरपालिका

९ नं वडा कार्यालय

राडीज्यूला, रुकुम (पश्चिम)

कर्णाली प्रदेश, नेपाल

सम्पर्क नं.
९८६१३९५८२१
९८५७८६६३४८

पत्र संख्याः २०७८/७९ मितिः २०७८/११/०२

चलानी नः ५५७६

श्री नेपाल विद्युत प्राधिकरण ,
वितरण तथा ग्राहक सेवा निर्देशनालय ,
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना ,दरबारमार्ग काठमाडौँ नेपाल ।

विषयः गुनासो समाधान संयन्त्र गठन भएको जानकारी सम्बन्धमा।

प्रस्तुत विषयमा एसियन इन्फ्रास्ट्रकचर बैंक लि.को आर्थिक सहयोग र त्यस कार्यालयको प्रस्तावनामा कार्यान्वयन हुन लागेको यस आठविसकोट न.पा वडा न. ९ हुदै वितरण हुने आठविसकोट भाम्पुचौर विद्युत वितरण लाईन प्रणालीमा विविध गुनासो सम्बोधन गर्न गुनासो समाधान संयन्त्र गठन भएको जानकारी तँहा कार्यालयको मिति २०७८/१०/७ चलानी न. १३८ भएको पत्रबाट भएको व्यहोरा जानकारीको लागि अनुरोध छ।

तारक बहादुर शाही
वडा अध्यक्ष

तारक बहादुर शाही
वडा अध्यक्ष

"समृद्ध गाउँ शहरको रहर: स्वस्थ, सफा, सुशासनयुक्त, समन्यायीक र समाजवाद उन्मूख आठविसकोट नगर"

E-mail: aathbiskotmunward9@gmail.com

आठविसकोट नगरपालिका
नगर कार्यपालिकाको कार्यालय
आठविसकोट, रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल

सम्पर्क
फोन नं. ९७४८५८३१३८, ९८४८११२८१७
Website: www.aathbiskotmun.gov.n

पत्र संख्या: २०७८/०७९ (योजना)
चलानी नम्बर : १६६४

मितिः २०७८/११/०२ गते

नगर कार्यपालिकाको कार्यालय आठविसकोट नगरपालिका आठविसकोट रुकुम (पश्चिम) कर्णाली प्रदेश, नेपाल

विषयः-जानकारी सम्बन्धमा।

श्री नेपाल विधुत प्राविकरण,
वितरण तथा ग्राहक सेवा निर्देशनालय, दरवारमार्ग, काठमाडौं।
(नेपाल वितरण प्रणाली स्तरोन्नती विस्तार आयोजना)

प्रस्तुत विषयमा तहाँ प्राधिकरणको च.न. १३८ मिति २०७८/१०/०७ गते गुनासो समाधान संयन्त्र गठन भएको सम्बन्धमा लेखिएको पत्र व्यहोरा अवगत भयो। सो सम्बन्धमा यस आठविसकोट नगरपालिका, रुकुम(पश्चिम) स्थित आठविसकोट- भाम्पुचौर विधुत वितरण लाईन आयोजना सम्बन्धी गुनासो समाधान संयन्त्र गठन भएको पत्र मिति २०७८/११/०२ गते प्राप्त भएको व्यहोरा अनुरोध छ।

१६६४/११/०२

राजेश गौतम
नि.प्रमुख प्रशासकीय अधिकृत

नि. प्रमुख प्रशासकीय अधिकृत

बाँफिकोट गाउँपालिका
७ नं. वडा कार्यालय
बाफीकोट रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल

पत्र संख्या: २०७८/०६९
चलानी नम्बर: ४९६

मिति: २०७८।११।०३

विषय:- समन्वय गरिदिने सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
हरिबारमाई, काठमाडौं।

प्रस्तुत विषयमा आठबीसकोट भम्पुचौर विद्युत वितरण लाईन आयोजनाको वातावरणीय तथा सामाजिक व्यवस्थापन योजना प्रतिवेदन तयारीको क्रममा यस वडाका बस्तीहरुमा लाईन जाने तिनी जमिनका जग्गाधनीहरुसँग तहाँ आयोजनाबारे गरिएको हलफलमा अनुपस्थित रहेका जग्गाधनीहरुसँग यस वडाकार्यालयले समन्वय गर्ने बाडारा जानकारी गराईदिई।

नरबहादुर रञ्जी
वडा अध्यक्ष

बाँफिकोट गाउँपालिका
७ नं. वडा कार्यालय
...बाफीकोट... रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल

पत्र संख्या: २०८/०६८
चलानी नम्बर: ६१४

मिति: २०८।१११।०

विषय:- आयोजनाले आदिवासी जनजातिलाई असर नगर्ने सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय नेपाल वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना हरवार भवन, कालिमाटी

प्रस्तुत विषयमा यहाँ स्थित कार्यालयबाट कार्यान्वयन गर्न लागिएको आठबीसकोट भम्पुचौर विद्युत वितरण लाइन आयोजना अन्तर्गत निर्माण हुने वितरण लाइन जाने यस वडाका बस्तीहरुमा आदिवासी जनजातिहरुको बसोबास नरहेकाले आदिवासी जनजातिहरुको परम्परागत रहनसहन, धर्म, भाषा, संस्कृति आदिमा आयोजनाबाट कुनै नकारात्मक असर नगर्ने व्यहोरा जानकारीका लागि अनुरोध छ।

नारबहादुर रावो
वडा अध्यक्ष
वडा अध्यक्ष

बाँफिकोट गाउँपालिका
७ नं. वडा कार्यालय
.....रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल

पत्र संख्याः २०८८/०६९
चलानी नम्बरः ४९५

मिति २०८८/११/०३

विषयः- गुनासो समाधान संयन्त्र गठन भएको पत्र प्राप्त सम्बन्धमा ।

श्री नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना पक्षमा माग काठमाडौं

प्रस्तुत विषयमा तहाँ कार्यालयको मिति २०८८/१०/०७ गते च.नं. १३८ को प्राप्त पत्रअनुसार आठबिसकोट भाम्पुचौर विद्युत वितरण लाईन आयोजनाको गुनासो समाधान संयन्त्र गठन भएको व्यहोरा प्राप्त भएको जानकारी गराईन्छ ।

नर बहादुर रावती
डा अध्यक्ष

नलगाड नगरपालिका
११ नं वडा कार्यालय
चौखा, जाजरकोट
कर्णाली प्रदेश

पत्र संख्या : २०७८।०७९
चलानी नं : ११६

मिति :

विषय : गुनासो समाधान संयन्त्र गठन भएको जानकारी उपलब्ध गराई पाऊ भएको सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण।
नेपाल वितरण प्रणाली सुदृढीकरण तथा विस्तार आयोजना
केन्द्रीय कार्यालय
काठमाण्डौं

प्रस्तुत विषय सम्बन्धमा तहा कार्यालयको पत्र जावत्र चलानी १३८ को प्राप्त पत्र अनुसार आठबीसकोट-भाम्पुचौर विद्युतीकरण लाईन आयोजनाको गुनासो समाधान संयन्त्र गठन भएको जानकारी प्राप्त भएको व्यहोरा जानकारी गराईन्छ।

२०७८।०१।२८

दुर्गा बहादुर नाथ
वडा सचिव

नलगाड नगरपालिका
११ नं वडा कार्यालय
चौखा, जाजरकोट
कर्णाली प्रदेश

पत्र संख्या : २०७८।०७९
चलानी नं : ११६

मिति : २०८१।१०।२८

विषय : सूचना टाँस गरि जानकारी पठाइएको बारे।

श्री नेपाल विद्युत प्राधिकरण।
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना।
दरबारमार्ग काठमाडौं।

प्रस्तुत विषय सम्बन्धमा तहा कार्यालयको प.वि.व्य.प्र.आ/७६ चलानी १३२ को प्राप्त पत्र अनुसार, आठबीसकोट, भानुचौर विद्युत वितरण लाइन आयोजना कार्यान्वयन हुँदा अगाडि आयोजनाले पर्यावरणको वातावरण तथा सामाजीक क्षेत्रमा के कस्तो प्रभाव पर्दछ भनि वातावरणीय तथा सामाजीक व्यवस्थापन योजना प्रतिवेदन तयारीका लागि स्थलगत सरोकार वालाहरुसंग छलफल गर्ने सम्बन्धी अर्थ निवेदन यस सम्बन्धमा सूचना मिति २०८१।१०।२८ गते यस वडा कार्यालयको सूचना पाटीमा सूचना टाँस गरि जानकारी पठाइएको व्यहोरा अनुरोध छ।

०८१।१०।२८
दुर्गा बहादुर नाथ
वडा सचिव

नलगाड नगरपालिका
११ नं वडा कार्यालय
चौखा, जाजरकोट
कर्णाली प्रदेश

पत्र संख्या : २०७८।०७९
चलानी नं : ११८ मिति :

विषय : आयोजनाले आदिवासी जनजातीलाई असर गर्ने सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण।
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना।
दरबारमार्ग काठमाडौं

प्रस्तुत विषय सम्बन्धमा च.नं.फा.प्रा.प्र.वि.प्र.स्त.वि.आ.का.प्र.२०७८ चलानी नं ७३६ को प्राप्त पत्र अनुसार एशियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए.आइ.आई.बी.) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा निर्देशनालय वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना प्रस्तावित रहेको कार्यान्वयन गर्न लागिएको आठबीसकोट, भेरुचौर विद्युत विस्तार आयोजना अन्तरगत यस वडाको प्रत्यक्ष प्रभावित बस्तिहरुमा आदिवासी जनजातीहरुको बसोबास नरहेको व्यहोरा जानकारी गराइन्छ।

०८८।१०।२८
दुर्गा बहादुर नाथ
वडा सचिव

नलगाड नगरपालिका
१० नं. वडा कार्यालय
रावत गाउँ जाजरकोट

पत्र संख्या :-०७८।०७९
चलानी ९९३

कर्णाली प्रदेश नेपाल
मिति :- २०७८/१०/१८

श्री : नेपाल विद्युत प्राधिकरण नेपाल वितरण प्रणाली
स्तरोन्नती तथा विस्तार आयोजना दरबारमार्ग
काठमाडौं ।

विषय : गुनासो समाधान संयन्त्र गठन भएको जानकारी
प्राप्त भएको सम्बन्धमा

प्रस्तुत विषय सम्बन्धमा यहाँ कार्यालयको च.नं.०७८/०७९ मिति ०१८ को प्राप्त पत्र
अनुसार आठबिस्कोट भाम्पुचोर विद्युत वितरण लाइन आयोजनाको गुनासो
समाधान संयन्त्र गठन भएको जानकारी प्राप्त भएको जानकारी गराइन्छ ।

भद्र बहादुर ध्यार
वडा अध्यक्ष

नलगाड नगरपालिका
१० नं. वडा कार्यालय
रावत गाउँ जाजरकोट

पत्र संख्या :-०७८।०७९
चलानी १९५

कर्णाली प्रदेश नेपाल
मिति :- २०७८/७/२८

श्री : नेपाल विद्युत प्राधिकरण नेपाल वितरण स्तरोन्नती तथा विस्तार आयोजना डरवारमार्ग काठमाडौं

विषय : आयोजनाले आदिवासी जनजातीलाई असर गर्ने सम्बन्धमा

प्रस्तुत विषयमा ए.ई.डि.ए.-०८८/०६९-७० -०३७ को प्राप्त पत्र अनुसार एसियन - इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए.आई.आई.बी.) को सहयोगमा नेपाल विद्युत प्राधिकरण वितरण तथा ग्राहक सेवा तिर्देशनालय वितरण प्रणालीको स्तरोन्नती तथा विस्तार आयोजना प्रस्तावक हुने कार्यान्वयन गर्न लागिएको आठबिसकोट - भाम्पुचौर विद्युत वितरण लाइन आयोजना अन्तर्गत यस वडाको प्रस्तुत प्रभावित बस्तीहरुमा आदिवासी जनजातीहरुको बसोबास नभएको तर केहि संख्यामा बसोबास रहेको भएतापनी आदिवासी जनजातीको समग्रमा तथा सान्दर्भिक वातावरणमा कुनैपनि प्रभाव नपर्ने व्यहोरा जानकारी गराउदछु ।

भद्र बहादुर शाही
वडा अध्यक्ष

नलगाड नगरपालिका
१० नं. वडा कार्यालय
रावत गाउँ जाजरकोट

पत्र संख्या :-०७८।०७९
चलानी नं ९९४

कर्णाली प्रदेश नेपाल
मिति :- २०७८/१२/२८

श्री नेपाल विद्युत प्राधिकरण/ नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना दरबारमार्ग जाजरकोट।

विषय:- सूचना टाँस गरी जानकारी पठाइएको बारे।

प्रस्तुत विषय सम्बन्धमा यहाँ कार्यालयको पत्र नं ०७८।०७९ च.नं ७६२ को प्राप्त पत्र अनुसार आठबिसकोट भाम्पुचौर विद्युत वितरण लाइन आयोजना कार्यान्वयन हुनु भन्दा अगाडि आयोजनाले यस क्षेत्रको वातावरण तथा सामाजिक क्षेत्रमा के कस्तो प्रभाव पर्दछ। भनि वातावरण तथा सामाजिक व्यवस्थापन आयोजना प्रतिवेदन तयारीका लागी स्थानिय सरोकारवालाहरु संग छलफल गर्ने सम्बन्धीत यसै निवेदन साथ संलग्न सूचना मिती २०७८।१०।२७ गते यस वडा कार्यालयमा सूचना पाटीमा सूचना टाँस गरी जानकारी पठाइएको व्यहोरा अनुरोध छ।

भद्र बहादुर ध्यार
वडा अध्यक्ष

आठविसकोट नगरपालिका

७ नं. वडा कार्यालय

रुवारुवारा, रुकुम (पश्चिम)

२०७३

पत्र संख्या :२०७८।०७९

चलानी नं. ९४६

मिति: २०७८।१११।२

विषय :- समन्वय गरिदिने सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

हरबरमार्ग, काठमाडौं

प्रस्तुत विषयमा एसियन इन्फ्रास्ट्रक्चर इन्भेस्टमेन्ट बैंक (ए. आई. आई. बी.) को ऋण सहयोगमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना अन्तर्गत आठविसकोट भम्पुचौर वितरण लाईन आयोजनाको वातावरणीय तथा सामाजिक योजनाको प्रतिवेदन तयारीको हकमा यसवडा भित्र निर्माण हुने लाईन तथा पोल पर्ने जग्गा धनीज्यु अनुपस्थित भएका यस वडा कार्यालयमा समन्वय गर्ने व्यक्तिको जानकारी गराईन्छ।

स्वराज बुढा
वडाध्यक्ष

आठविसकोट नगरपालिका

७ नं. वडा कार्यालय

रवारस्वारा, रूकुम (पश्चिम)

२०७३

पत्र संख्या :२०७८/२०८९

चलानी नं. ६९६

मिति: २०७८/१११/१

विषय :- आयोजनाले आदिवासी जनजातिलाई असर गर्ने नगर्ने सम्बन्धमा

श्री नेपाल विद्युत प्राधिकरण

नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

इखारस्वारी, रूकुमकोट

उपरोक्त सम्बन्धमा नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय, वितरण प्रणाली सुदृढ स्तरोन्नती तथा विस्तार आयोजनाद्वारा कार्यान्वयन गर्न लागिएको आठविसकोट-भम्पुचौर वि.वि. वितरण लाईन आयोजना अन्तर्गत यस आठविसकोट न.पा ७ नं वडा हुँदै वितरण लाईन जाने बस्तीहरूमा आदिवासी जनजातिहरूको बसोबास नरहेको व्यहोरा जानकारीको लागि अनुरोध छ ।

१/८/७८

नवराज पुन

वडाध्यक्ष

आठविसकोट नगरपालिका

७ नं. वडा कार्यालय

सदरस्थान, रुकुम (पश्चिम)

२०७३

पत्र संख्या :२०७८/२०७९

चलानी नं. ६९८ मिति:.२०७८।९।१२

विषय :- गुनासो समाधान संयन्त्र गठन भएको जानकारी सम्बन्धमा

श्री तेपाल विद्युत प्राधिकरण

तेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना

दरबारमार्ग, काठमाडौं

प्रस्तुत विषयमा तँडा स्थित कार्यालयको मिति२०७८।१०।

चं.नं ९३८ को पत्रानुसार आठविसकोट-भाम्पुचौर विद्युत वितरण लाइ

आयोजनाको गुनासो समाधान संयन्त्र गठन भएको व्यहोरा जानकारी गराईएछ ।

स्वराज बुढा

वडाध्यक्ष

आठविसकोट नगरपालिका
१० नं.वडा कार्यालय
भयाउने, रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल

सम्पर्क नं.
९८५१२१६२३१
९८५११७१७३८

Website:
www.aathbiskotmun.gov.np

पत्र संख्या: २०७८।०७९
चलानी नम्बर ९९७

मिति: २०७८।११।०३

विषय: आयोजनाले आदीबासी जनजातीलाइ असर नगर्ने सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवार मार्ग काठमाण्डौ

प्रस्तुत विषयमा तहाँ कार्यालयबाट कार्यान्वयन गर्न लागिएको आठबिसकोट भाम्पुचौर विद्युत वितरण लाईन आयोजना अन्तर्गत निर्माण हुने वितरण लाईन जाने यस वडाका बस्तीहरुमा आदीबासी जनजातीहरुको बसोबास नरहेकाले आदीबासी जनजातीहरुको परम्परागत रहनसहन, धर्म, भाषा, सस्कृती आदीमा आयोजनाबाट कुनै नकरात्मक असर नगर्ने व्यहोरा जनकारीको लागि अनुरोध छ।

राम बहादुर मल्ल
प्रशासन सहायक

आठविसकोट नगरपालिका
१० नं.वडा कार्यालय
भयाउने, रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल

सम्पर्क नं.
९८५१२१६२३१
९८५११७१७३८

Website:
www.aathbiskotmun.gov.np

पत्र संख्या: २०७८।०७९
चलानी नम्बर ९९८

मिति: २०७८।११।०३

विषय: गुनासो समाधान संयन्त्र गठन भएको पत्र प्राप्त सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरबार मार्ग काठमाण्डौ

प्रस्तुत विषयमा तहाँ कार्यालयको मिति २०७८।१०।०७ गते च न १३८ को प्राप्त पत्रअनुसार आठबिसकोट भाम्पुचौर बिद्युत वितरण लाईन आयोजनाको गुनासो समाधान संयन्त्र गठन भएको ब्यहोरा प्राप्त भएको जानकारी गराईन्छ।

राम बहादुर मल्ल
प्रशासन सहायक

आठविसकोट नगरपालिका
१० नं.वडा कार्यालय
भयाउने, रुकुम (पश्चिम)
कर्णाली प्रदेश, नेपाल
सम्पर्क नं.
९८५१२१६२३१
९८५११७१७३८
Website:
www.aathbiskotmun.gov.np

पत्र संख्या: २०७८।०७९
चलानी नम्बर ९९९

मिति: २०७८।११।०३

विषय: समन्वय गरिने सम्बन्धमा।

श्री नेपाल विद्युत प्राधिकरण, वितरण तथा ग्राहक सेवा निर्देशनालय
नेपाल वितरण प्रणाली स्तरोन्नती तथा विस्तार आयोजना
दरवार मार्ग काठमाण्डौ

प्रस्तुत विषयमा आठबिसकोट भाम्पुचौर विद्युत वितरण लाईन आयोजनाको वातावरणीय तथा सामाजिक ब्यबस्थापन योजना प्रतिवेदन तयारीको क्रममा यस वडाका बस्तीहरुमा वितरण लाईन जाने निजी जमिनका जग्गाधनी हरुसंग तहाँ आयोजना बाट गरिएको छलफलमा अनुपस्थित रहेका जग्गाधनी हरुसंग यस वडा कार्यालयले समन्वय गर्ने ब्यहोरा जानकारी गराईन्छ।

राम बहादुर मल्ल
राम बहादुर मल्ल
प्रशासन सहायक

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, ~~बितस्कोट~~ रुकुम पश्चिम जिल्ला, आठबिस्कोट गापा/नपा ..6.. वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस रुकुम पश्चिम जिल्ला आठबिस्कोट गाउँ/नगर पालिका वार्ड नं 6, रुवाखरा मा आज २०७८.1.29 गते हामी तपसिलका व्यक्तिहरुको रोहबरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	लक्ष्मण बोहरा	आ.नं.पा ६	[illegible]	९७४८४७५७७	
२	समिर बोहरा	आ.न.पा.६		९८४८५५१०४२	
३	बल बहादुर बोहरा	आ.न.पा.६		९८४९९७८५२०	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, नलागाड गापा/नपा ८ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला नलागाड गाउँ/नगर पालिका वार्ड नं ८, कायाकोट मा आज २०७८।१०।२९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१)	हरि ब. सिंह	कायाकोट, नलागाड-८	कृषि	९८४०५४५१९८	
२)	तारा शाही	,,	,,	९८६५२३०३५१	
३)	प्रकाश शाही	,,	,,	९८४८८१६०४८	
४)	नौलु मल्ल	,,	,,	९८६५१११९५५	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, नलगाड गापा/नपा ८ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला नलगाड गाउँ/नगर पालिका वार्ड नं ८, मालुवाबारगाँ मा आज २०७८।१२।२९ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१)	मिलन बुढा मगर	मालुवाबाट, नलागाड-८	कृषि	९८६८७४७४३८	
२)	विरेन्द्र ब. बुढा	,,	शिक्षक	९८६६७२१९१४	
३)	मनोज परियार	,,	कृषि	९८४७१६५६५२	मनोज
४)	खड्ग ब. सिंह	,,	कृषि	—	२०७

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, नलागाड गापा/नपा ३ वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला नलागाड गाउँ/नगर पालिका वार्ड नं ३, दारिमपाता मा आज २०७८।१०।२८ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	बसुदेव वि.क	नलागाड, ३	कृषि	९८४२७८४४४	
२	रामबा वि.क	"	"	९८४२७६४८०	
३	शंकर वि.क	"	"		
४	रोशन रावल	"	"	९८४३५३	
५	पदम कुमारि सिंह	"	"	—	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक ब्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी**

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, रुकुम पश्चिम जिल्ला, आठबिस्कोट गापा/नपा ५ वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस रुकुम पश्चिम जिल्ला आठबिस्कोट गाउँ/नगर पालिका वार्ड नं ५, भलिगाड मा आज २०७८/१०/१८ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१.	कर्ण बुढा	आठबिसकोट ८ भलिगाड	कृषी	९८४५८५४५५५	
२.	कुमार बुढा	"	"	"	
३.	तिरबे महतारा	"	"	"	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) **प्रतिवेदन तयारी सम्बन्धी सार्वजनिक सूचना टाँस को मुचुल्का**

कर्णाली प्रदेश, आछाम जिल्ला, दलगाउँ गापा/नपा ..... वडामा **नेपाल विद्युत प्राधिकरण** द्वारा प्रस्तावित "**बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना**" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस आछाम जिल्ला दलगाउँ गाउँ/नगर पालिका वार्ड नं ९० , राखा मा आज २०७८/१०/२६ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	धनकाप थापा	दलगाउँ, ९० राखा	कृषि	९८६२९८०३३८	
२	विश्व प्रकास थापा	" "	"	९८६२११८२६९	
३	धनराम रावत	"		९७४४ ४९ ४१८८	
४	मोती सुनार	"		MOH	
५	रुपेश बं. रावत	"		९७४२२६३२४	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, नलगाड गापा/नपा वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यवस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला नलगाड गाउँ/नगर पालिका वार्ड नं १, भेरी मा आज २०७८/१०/२८ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१,	रनेगराज	जिरी नलगाड ३-पा-१	कृषि	९८५८६३००५	
२,	रैराम	खिई ,, ,,	कृषी	९७४२३६६८२९	
३,	राम क	परियार ,, ,, ,,		९७४५४९५५६९	
४,	इन्द्र क	निरु ,, ,,	शिक्षक	९८६३६४५९८	
५,	नेत्र क	विष्ट ,, ,,	कृषी	९८४९६९४९९	नेत्र
६,	भाय	बं. जिरी ,, ,, ,,		९८४७८४०४९९	
७,	लोग	क विष्ट ,, ,, ,,	,,		
८,	हेमराज	नि.रु ,, ,, ,,		९८४३६७३९९	

बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना अन्तर्गतका उपआयोजनाहरुको वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environmental and Social Management Plan) प्रतिवेदन तयारी सम्बन्धी

सार्वजनिक सूचना टाँस को मुचुल्का

कर्णाली प्रदेश, जाजरकोट जिल्ला, नलागाड गापा/नपा ९० वडामा नेपाल विद्युत प्राधिकरण द्वारा प्रस्तावित "बितरण प्रणाली स्तरउन्नति तथा विस्तार आयोजना" को वातावरणीय तथा सामाजिक व्यबस्थापन योजना (Environment and Social Management Plan) प्रतिबेदन तयारी सम्बन्धि सार्वजनिक सूचना यस जाजरकोट जिल्ला नलागाड गाउँ/नगर पालिका वार्ड नं ९०, रोली चौला मा आज २०७८/१०/२६ गते हामी तपसिलका व्यक्तिहरुको रोहवरमा टाँस गरिएको प्रमाणित गर्दै यो मुचुल्का गरिदियौं।

तपसिल

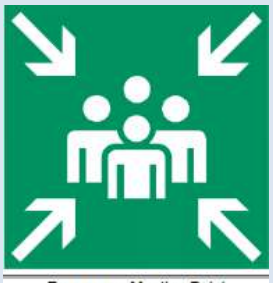
क्र.स.	नाम	ठेगाना	पेशा	सम्पर्क नम्बर	हस्ताक्षर
१	नर बहादुर बोहोरा	नलागाड न.पा.९०	कृषि	९८६४६१६४१४	
२	अम्बर बहादुर बिष्ट	"	"	९८५८२१६९२४	
३	छिल्ली बहादुर रावत	"	"	९८५८३८५५१८	

Annex 7: SAFETY RELATED SIGNS AND WASTE MANAGEMENT PRACTICES

SIGNAL NOTICE



First Aid
प्राथमिक उपचार



Emergency Meeting Point
आकस्मिक भेला हुने ठाउँ



Fire Extinguisher
अग्नी नियन्त्रण उपकरण



Fire hose
अग्नी नियन्त्रण पाइप

DANGER SIGNS



Keep Out
निर्माण क्षेत्र- टाढै रहनुहोस्



Danger
खतरा - खुल्ला खाल्डो



Danger of open trench
खतरा - खुल्ला ट्रेन्च



No operation without safety guards
सुरक्षाका साधनविना यो उपकरण संचालन गर्न निषेध

INSTRUCTION SIGNS







Slow Sign for Traffic Control
ट्रिलाई बानुहोस्



Directional Exit Sign
बाहिर जाने दिशा

SAFETY AND SAFETY INSTRUCTION SIGNS



Safety Gloves Required
सेफ्टी पन्जाको आवश्यक



Safety Vests Required
सेफ्टी भेस्टको आवश्यक



Safety Glasses Required
सेफ्टी चश्मा आवश्यक



Safety Shoes Required
सेफ्टी जुता आवश्यक

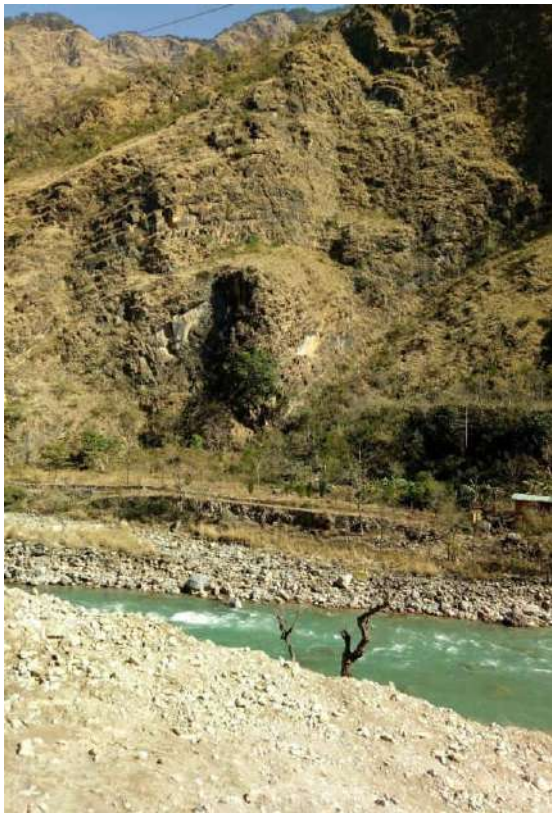

निर्माणस्थलमा गर्नहुने र नहुने कुराहरु


निर्माणस्थलमा गर्नहुने र नहुने कुराहरु

Annex 8: PHOTOGRAPHS



Land for the proposed substation at Vampuchaur, West Rukum



Thuli bheri crossingat the edge of Chhinchu - Jajarkot – Dunai Road



Public consultation at Chaukha, Nalagad Municipality, Ward No. 11



Tashu khola crossing of the proposed distribution line



Crossing in Thuli Bheri River



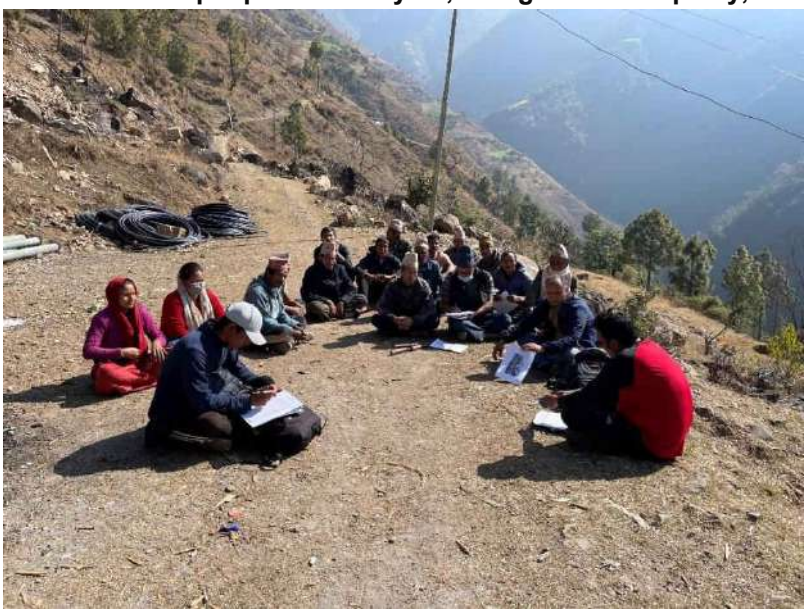
Line allignment from kharkhara towards Aulligaun



Bheri crossing near Kayakhet, Nalagaad Municipality Ward No. 8



Consultation with local people at Roli Jyula, Nalagaad Municipality, Ward No. 10



Public consultation at Bhayaune, Aathbiskot, Ward No. 10